

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM, INC.,
AMAZON.COM SERVICES LLC,
AMAZON WEB SERVICES, INC., and
TWITCH INTERACTIVE, INC.
Petitioner

v.

NL GIKEN INC.
Patent Owner

Inter Partes Review No.: IPR2025-00407

**PETITION FOR INTER PARTES REVIEW
OF U.S. PATENT NO. 8,677,391**

TABLE OF CONTENTS

	Page
I. Introduction.....	1
II. Statement of Precise Relief Requested.....	1
III. The '391 Patent.....	1
A. Overview of the '391 Patent.....	1
B. Overview of the '391 Patent's File History	3
C. Person of Ordinary Skill in the Art	3
D. Claim Construction.....	4
1. a "presentation" (claims 1, 10).....	4
2. "controller" (claims 1-2, 7, 10-14).....	4
3. "a second controller adapted to receive an electric payment" (claims 1, 10).....	5
4. "advertising image data delivery system" and "advertiser" (claim 10).....	6
E. Patent Owner's Infringement Contentions.....	6
IV. Ground 1: Claims 1-2, 7, 9-15 Are Obvious over Ray in View of Nolan.....	7
A. Overview of Ray	7
1. Ray Is Entitled to Its Provisional's Filing Date.	8
2. Ray Incorporates by Reference Its Provisional Application.....	10
B. Overview of Nolan	10
C. Claim 1	12
1. [1.pre].....	12
2. [1.a]	14
3. [1.b.i].....	17
4. [1.b.ii].....	19
5. [1.b.iii].....	24
6. [1.c]	27

a.	The Report	28
b.	The Electric Payment.....	34
D.	Claim 2.	39
E.	Claim 9.	40
F.	Claim 10	44
1.	[10.pre]	44
2.	[10.a]	46
3.	[10.b.i]	47
4.	[10.b.ii]	48
5.	[10.c.i]	50
6.	[10.c.ii]	54
7.	[10.c.iii]	56
8.	[10.d]	56
G.	Claim 11.	58
H.	Claim 12.	60
I.	Claim 13.	61
J.	Claim 14.	63
K.	Claim 15.	64
V.	Ground 2: Claims 13 and 14 Are Obvious in View of Ray, Nolan, and Cansler	65
A.	Overview of Ray and Nolan.....	65
B.	Overview of Cansler.....	65
C.	Claim 13	66
D.	Claim 14	67
VI.	Discretionary Denial Is Not Warranted	68
A.	35 U.S.C. §314(a) Analysis.....	68
1.	Stay.....	68
2.	Trial Date	68
3.	Parallel Proceeding	69

4.	Issue Overlap.....	69
5.	Same Party	70
6.	Other Considerations	71
B.	§ 325(b) Analysis	71
VII.	Mandatory Notices Under 37 C.F.R. §§42.8(b)(1)-(4)	72
A.	Real Party-In-Interest	72
B.	Related Matters.....	72
C.	Lead and Backup Counsel.....	73
D.	Service Information.....	74

INDEX OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 8,677,391 (the “ ’391 patent ”).
1002	Declaration of Dr. Chandrajit Bajaj.
1003	File History of U.S. Patent No. 8,677,391.
1004	U.S. Patent App. Pub. No. 2007/0288951 (“ Ray ”).
1005	U.S. Patent App. Ser. No. 60/745,998 (Ray provisional application).
1006	U.S. Patent App. Pub. No. 2006/0053049 (“ Nolan ”).
1007	U.S. Patent No. 8,016,185 (“ Modi ”).
1008	U.S. Patent No. 8,561,113 (“ Cansler ”).
1009	Excerpt of <i>The Chambers Dictionary</i> (10th ed. 2006) (definition of “present”).
1010	<i>NL Giken Inc. v. Amazon.com, Inc.</i> , 1:24-cv-00028, (D. Del. Oct. 21, 2024), Patent Owner’s Initial Infringement Claim Chart for the ’391 Patent (Exhibit C-1).
1011	U.S. District Courts— <i>Combined Civil and Criminal Federal Court Management Statistics</i> (Sept. 30, 2024).
1012	<i>NL Giken Inc. v. Amazon.com, Inc.</i> , 1:24-cv-00028, Dkt. 32 (D. Del. Jun. 18, 2024) (Scheduling Order).

CHART OF CLAIMS
[1.pre] A moving image data delivery system capable of being in communication with a plurality of moving image viewing apparatuses and an advertising image data delivery system comprising:
[1.a] a storage of a plurality of digital moving image data of television programs to be viewed by the moving image viewing apparatuses;
[1.b.i] a first controller adapted to electrically provide one of the digital moving image data of television programs to one of the moving image viewing apparatuses for allowing to display the television program in exchange of a presentation of an electric data denoting a right of viewing the television program,
[1.b.ii] the electric data having been issued to the moving image viewing apparatus, without intermediary of the moving image data delivery system, by the advertising image data delivery system in exchange of a commercial message view by the moving image viewing apparatus, provided by the advertising image data delivery system,
[1.b.iii] wherein no electric payment is made to the moving image data delivery system when the advertising image data delivery system issues the electric data to the moving image viewing apparatus in exchange of viewing commercial message; and
[1.c] a second controller adapted to receive an electric payment from the advertising image data delivery system in exchange of a presentation of a report from the moving image data delivery system to the advertising image data delivery system, the report indicating that the moving image data delivery system is presented with the electric data.
[2] The moving image data delivery system according to claim 1, wherein the first and second controllers are included in a computer as the function thereof.
[9] The moving image data delivery system according to claim 1, wherein the advertising image data delivery system is integrated into the moving image data delivery system.
[10.pre] An advertising image data delivery system capable of being in communication with a plurality of moving image viewing apparatuses, a moving image data delivery system and an advertiser paying for the commercial message comprising:
[10.a] a storage of a plurality of advertising image data of commercial messages to be viewed by the moving image viewing apparatuses;
[10.b.i] a first controller adapted to issue, without intermediary of the moving image data delivery system, to one of the moving image viewing apparatuses an electric data denoting a right of viewing a television program in exchange of

commercial message view by the moving image viewing apparatus, provided by the advertising image data delivery system,
[10.b.ii] wherein the one of the moving image viewing apparatuses is provided with the television program from the moving image data delivery system in exchange of a presentation of the electric data to the moving image data delivery system from the one of the moving image viewing apparatus;
[10.c.i] a second controller adapted to receive an electric payment from the advertiser in exchange of a presentation of a report from the advertising image data delivery system to the advertiser,
[10.c.ii] the report indicating that the advertising image data delivery system issues the electric data to the moving image viewing apparatuses,
[10.c.iii] wherein no electric payment is made to the moving image data delivery system when the advertising image data delivery system issues the electric data to the moving image viewing apparatus in exchange of viewing commercial message; and
[10.d] a third controller adapted to allot the received electric payment to the moving image data delivery system in exchange of a presentation of a report from the moving image data delivery system to the advertising image data delivery system, the report indicating that the moving image data delivery system is presented with the electric data.
[11] The advertising image data delivery system according to claim 10 further comprising a fourth controller adapted to electrically provide the plurality of advertising image data of commercial messages [sic, messages] to one of the plurality of moving image viewing apparatuses in an automatic manner.
[12] The advertising image data delivery system according to claim 10 further comprising a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses by request thereof.
[13] The advertising image data delivery system according to claim 10 further comprising a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses, the advertising image data of commercial message being related to a television program designated by the moving image viewing apparatus.
[14] The advertising image data delivery system according to claim 10 further comprising a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses, the plurality of advertising image data of commercial messages including an advertisement of a television program.

[15] The advertising image data delivery system according to claim 10, wherein the advertising image data delivery system is integrated into a system of the advertiser.

I. INTRODUCTION

Amazon.com Inc., Amazon.com Services LLC, Amazon Web Services, Inc., and Twitch Interactive, Inc. (collectively, “Petitioner”) petitions for *inter partes* review of U.S. Patent No. 8,677,391 (the “’391 patent”) (EX1001). As shown below, the claims of the ’391 patent were known in the art.

In accordance with 37 C.F.R. §42.104(a), Petitioner certifies that the ’391 patent is available for *inter partes* review and that Petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent claims on the grounds identified in this Petition.

II. STATEMENT OF PRECISE RELIEF REQUESTED

Petitioner requests cancellation of claims 1-2, 9-15 of the ’391 patent in view of the following grounds:

Ground	Claims	Statutory Basis	Prior Art
1	1-2, 9-15	§103	Ray and Nolan
2	14	§103	Ray, Nolan, and Cansler

III. THE ’391 PATENT

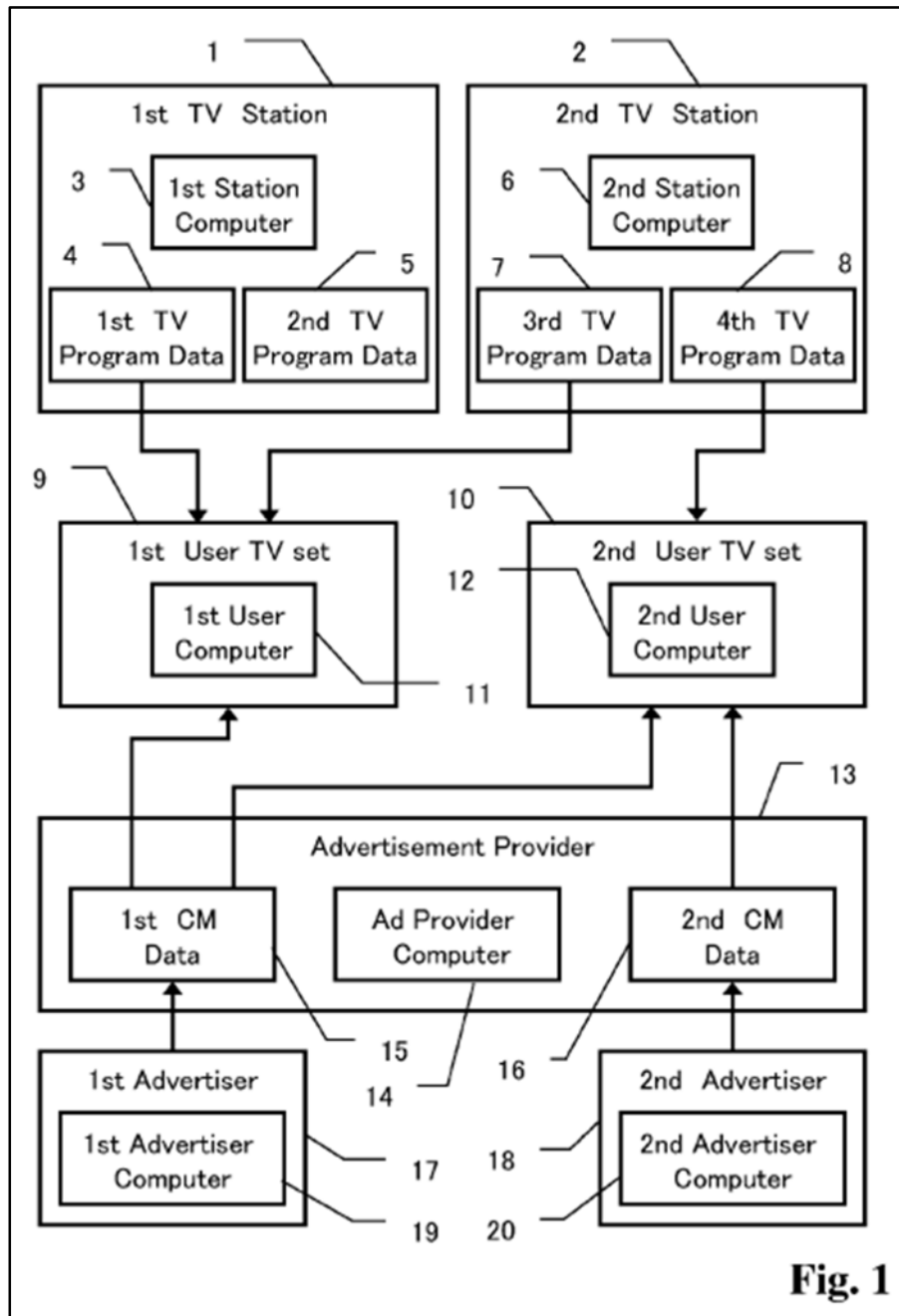
A. Overview of the ’391 Patent

The ’391 patent claims priority to a domestic application filed July 8, 2007, and to a foreign application filed July 9, 2006. EX1001, cover page. Accordingly, the ’391 patent’s priority date is no earlier than July 9, 2006. EX1002, ¶53.

The ’391 patent discloses a “moving image enjoying system,” *i.e.*, television

system, with an advertisement viewing incentive program. EX1001, 1:9-13,

Abstract. The system includes television stations (1-2), an advertisement provider (13), users' television sets (9-10), and advertisers (17-18):



EX1001, Fig. 1, 6:55-7:2, 7:34-37, 7:57-62, 9:9-11. The advertisement provider

delivers advertisements to the users. EX1001, 7:57-65. A user is credited with “electronic coupon[s]” for viewing commercials and can redeem those coupons for free programming. EX1001, 8:27-38. The advertisers pay the advertisement provider “in accordance with the actual viewing” of commercials. EX1001, 9:17-25. The advertisement providers pay the television stations “in accordance with the actual presentation of the electric coupon[s]” in exchange for viewing television programming. EX1001, 9:26-31. EX1002, ¶54.

B. Overview of the '391 Patent's File History

During prosecution, Applicant amended the claims to overcome rejections under 35 U.S.C §102 and §103. EX1003, 138-158, 167-180, 222-252, 331-360, 413-434. EX1002, ¶55.

C. Person of Ordinary Skill in the Art

A person of ordinary skill in the art at the time of the alleged invention of the '391 patent (July 9, 2006) (“POSITA”) would have had a Bachelors’ degree in electrical or computer engineering or a comparable field of study, plus approximately two to three years of professional experience with television systems, content distribution systems, distributed systems, or other relevant industry experience. Additional graduate education could substitute for professional experience, and significant experience in the field could substitute for formal education. EX1002, ¶56.

D. Claim Construction

The challenged claims are interpreted using the same claim construction standard that is used to construe the claim in a civil action in federal district court. 37 C.F.R. §42.100(b). Petitioner does not contend that its proposed constructions are complete constructions of these limitations or the claims for any other purpose, including for issues that have been raised in the related litigation. Because the prior art asserted herein discloses the preferred embodiment within the indisputable scope of the claims, the Board need not construe the outer bounds of the claims. Any claim terms not listed below should be construed according to their plain and ordinary meaning to a POSITA. EX1002, ¶57.

1. a “presentation” (claims 1, 10)

The plain meaning of a “presentation” includes an offer or a giving. EX1009, 4 (defining “present” to include “to give,” “to deliver, convey, or hand over,” etc.). EX1002, ¶58.

2. “controller” (claims 1-2, 7, 10-14)

“Controller” is not a means-plus-function limitation because “controller” conveys sufficient structure to a POSITA (*e.g.*, hardware and/or software that performs control functions). EX1001, 48:45-50, 48:61-65, 50:20-31. A POSITA would have understood “controller” to include hardware (*e.g.*, CPU) and/or software programmed to control part of a system. The Board therefore should construe “controller” to include any hardware and/or software that controls part of

the recited “moving image data delivery system” (for claim 1) or the recited “advertising image data delivery system” (for claim 10). EX1001, 48:38-41, 49:43-47. EX1002, ¶¶59-60.

If this limitation is construed as a means-plus-function limitation, the corresponding function should be controlling part of the moving image data delivery system (for claim 1) or advertising image data delivery system (for claim 10), as recited by the applicable limitation, and the corresponding structure should be controller 100 and equivalents. EX1001, Fig. 24, 48:18-27. EX1002, ¶61.

3. “a second controller adapted to receive an electric payment” (claims 1, 10)

Patent Owner apparently construes this limitation to include a processor/software that can access an account that receives the electric payment. EX1010, 17 (a “processor”), 20 (excerpt of a “dashboard” that “shows the amount of revenue...generated”). Petitioner adopts this apparent construction for purposes of this Petition, but reserve the right to assert a different meaning in the Delaware Litigation (*see* §VII(B)). *Western Digital Corp. v. Spex Techs., Inc.*, IPR2018-00082, Paper 11, at *11-12 (PTAB Apr. 25, 2018) (petition based on claim constructions urged by Patent Owner satisfies the claim construction requirements, and Petitioner is not required to express its agreement with, or take ownership of, the offered construction); *General Electric v. Vestas*, IPR2018-00928, Paper 9, at *12-14 (PTAB Nov. 5, 2018) (no prohibition against offering Patent Owner’s

expected interpretation); *Abbott Diabetes Care Inc. v. Dexcom, Inc.*, IPR2022-00913, Paper 14, at *12-14 (PTAB Nov. 3, 2022) (Petitioner is not required to advance the same claim interpretation in an IPR and related litigation). EX1002, ¶62.

4. “advertising image data delivery system” and “advertiser” (claim 10)

The Board should give these claim terms in the preamble of claim 10 their full scope such that the “advertiser” can be part of the “advertising image data delivery system.” The ’391 patent contains no lexicography or disclaimer that would require these limitations to be separate and distinct structures. In addition, the specification states that an “advertisement provider” (*i.e.*, an advertising image data delivery system) can be “combin[ed]” with a “television station” (*i.e.*, the “moving image data delivery system” of the preamble of claim 10). EX1001, 9:1-5. Similarly, there is no reason in the ’391 patent that the recited “advertising image data delivery system” could not instead be combined with the recited “advertiser.” Moreover, claim 10 describes these claim terms functionally rather than structurally, further indicating that they do not require distinct components. EX1001, 49:43-50:26. EX1002, ¶63.

E. Patent Owner’s Infringement Contentions

“[P]atent owners may not, like a ‘nose of wax,’ twist the meaning of patent claims one way to avoid a finding of unpatentability and in another way so as to

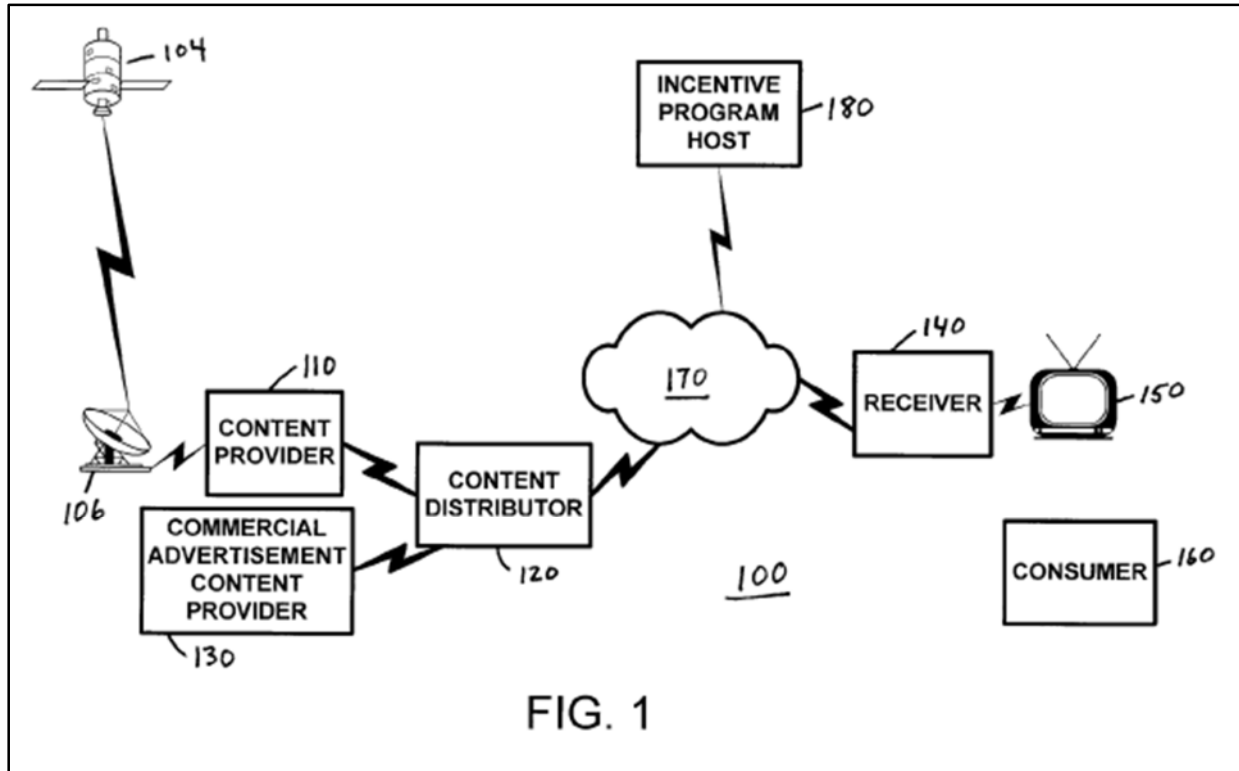
find infringement.” *Ericsson Inc. v. Intellectual Ventures II LLC*, IPR2014-00919, Paper 37 at 9 (PTAB Dec. 7, 2015). In this regard, Patent Owner’s infringement allegations are “probative” of whether Patent Owner is taking “inconsistent positions” between this proceeding and district court litigation and are “relevant of the credibility” of Patent Owner’s “characterization of the [asserted] Patent in this proceeding.” *Id.* at 9-10; *Square, Inc. v. Unwired Planet LLC*, IPR2014-01164, Paper 28 at 37-38 (PTAB Nov. 19, 2015). Accordingly, Petitioner includes Patent Owner’s Infringement Contentions for the ’391 patent (Exhibit C-1, EX1010) from the parties’ litigation.

IV. GROUND 1: CLAIMS 1-2, 7, 9-15 ARE OBVIOUS OVER RAY IN VIEW OF NOLAN.

A. Overview of Ray

U.S. Patent App. Pub. No. 2007/0288951 (“Ray”) was filed on April 30, 2007 and claims priority to a provisional application filed April 28, 2006. EX1004, cover page. Ray is prior art under 35 U.S.C. §102(e) (pre-AIA). EX1002, ¶65.

Ray discloses a system “that provides incentive to view advertisements such as television commercials.” EX1004, ¶24. The system includes a content provider 110, broadcaster 120, advertiser 130, receiver 140 and television 150 associated with consumer 160, and incentive program host 180, as shown below.



EX1004, Fig. 1, ¶¶24-29. Host 180 “reward[s] the consumer” with credits “for playing commercial advertisements.” EX1004, ¶32, ¶29. The consumer redeems credits for content such as “additional program content,” “behind-the-scenes content,” and “highlights or interviews.” EX1004, ¶47. EX1002, ¶66.

Ray is analogous art to the '391 patent and was not cited during prosecution of the '391 patent. EX1001, 1-2; EX1003. EX1002, ¶¶67-69.

1. Ray Is Entitled to Its Provisional’s Filing Date.

Ray claims priority to provisional application 60/745,998 (EX1005). EX1004, cover page, ¶1. Because the provisional application provides written description support for at least one claim of Ray, as shown below, Ray is entitled to the provisional application’s filing date. *Dynamic Drinkware, LLC v. Nat’l*

Graphics, Inc., 800 F.3d 1375, 1379-1381 (Fed. Cir. 2015).

Ray Claim 1 (EX1004)	Provisional Support (EX1005)
A method comprising:	pp. 1-3; <i>see also</i> citations below.
registering a consumer in an incentive program, said incentive program configured to incite a consumer to play an advertisement;	pp. 10 (“[v]iewer registers as a member”), 18 (same), 6 (“‘Loyalty Account’ – a consumer account with loyalty program provider host that can contain promotional ‘coupons’ and loyalty points which can be redeemed via Advertiser”), 8 (“‘Advertiser’ creates promotion coupon offering via loyalty program provider host”), 15 (“Person [signs] up for the program by telling the [TV] provider that they want to take part in the program”).
transmitting program content comprising non-commercial content and a commercial to a content receiver operated by a consumer, wherein said content receiver is configured to store said non-commercial content as stored non-commercial content and configured to store said commercial as a stored commercial for later playback;	pp. 1 (“Personal Video Recorders (PVRs)”), 2 (“not skipping through commercials using PVR technology”), 5 (“time-shifted viewing device such as a PVR”), 20 (“Primary Content Provider creates content with designated commercial breaks.”), 21 (“Commercial is delivered to ‘viewing device’ ahead of time...and stored along with meta-information for later playback....Primary Content is delivered to ‘viewing device’ with meta-information. ‘Viewing device’ decides which commercials to show”).
determining that said consumer played said stored commercial;	pp. 1 (“this solution provides...a way to connect to the action of watching/listening to custom offers, and a concrete mechanism for knowing which commercials are viewed and by whom”), 15 (“The PVR will send size...information about all the [commercials] the person watched during the program”), 19 (“Viewer receives incentives based on commercials viewed”), 21 (“Information gather[ed] on which commercials were shown in full...may also be used to

	determine number of generic ‘viewer points’ the viewer earns.”).
crediting to said consumer an incentive program credit in return for said consumer playing said commercial.	pp. 1 (“provide incentives to the viewer...based on the commercials they view”), 2 (“Provide incentives to viewers for watching advertisements...by offering them value (loyalty points, discounts, etc.) for not skipping through commercials”), 21 (“Information gather[ed] on which commercials were shown in full...may also be used to determine number of generic ‘viewer points’ the viewer earns. Earning may be set based on ‘advertiser point’ rates.”).

Ray’s provisional application also provides written description support for the portions of Ray’s publication on which Petitioner relies, as established below for each limitation in footnote citations. EX1002, ¶¶70-72.

2. Ray Incorporates by Reference Its Provisional Application.

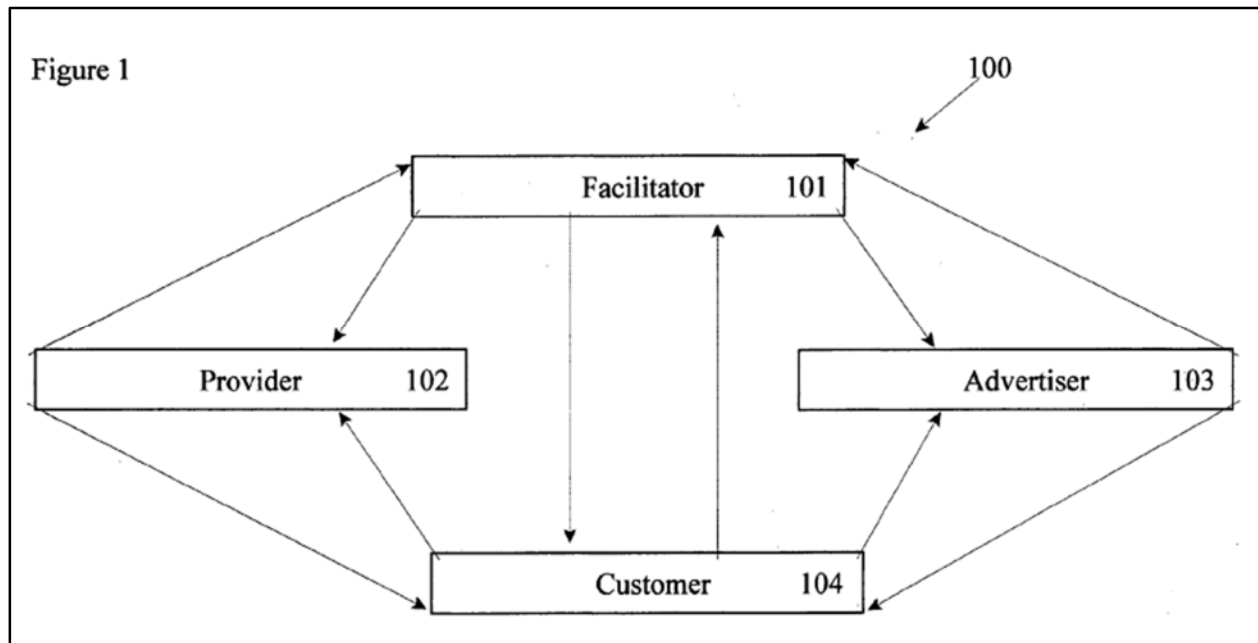
Ray expressly incorporates by reference the entirety of the provisional. EX1004, ¶1. Thus, the disclosure of the provisional is part of Ray’s disclosure, as if it were explicitly contained in Ray. *See Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc.*, 127 F.3d 1065, 1069 (Fed. Cir. 1997); *Apple Inc. v. Koss Corp.*, IPR2021-00255, Paper 54 at 25-30 (PTAB May 31, 2022). EX1002, ¶73.

B. Overview of Nolan

U.S. Patent App. Pub. No. 2006/0053049 (“Nolan”) was filed on September 4, 2004, and published on March 9, 2006. EX1006, cover page. Nolan is prior art

under 35 U.S.C. §§102(a) and (e) (pre-AIA). EX1002, ¶74.

Nolan discloses a system that provides users with media (*e.g.*, television, or movies) in exchange for the user viewing advertisements. EX1006, ¶1, ¶6. The system includes a Facilitator 101, a Provider 102, an Advertiser 103, and a Customer 104:



EX1006, Fig. 1, ¶77. When Customer views an advertisement, Facilitator provides Customer with a credit, which Facilitator uses to pay Provider for the services it provides to Customer. EX1006, ¶¶77-78. Advertiser pays Facilitator for providing its advertisement to Customer 104. EX1006, ¶80. EX1002, ¶75.

Nolan is analogous art to the '391 patent and was not cited during prosecution of the '391 patent. EX1001, 1-2; EX1003. EX1002, ¶¶76-78.

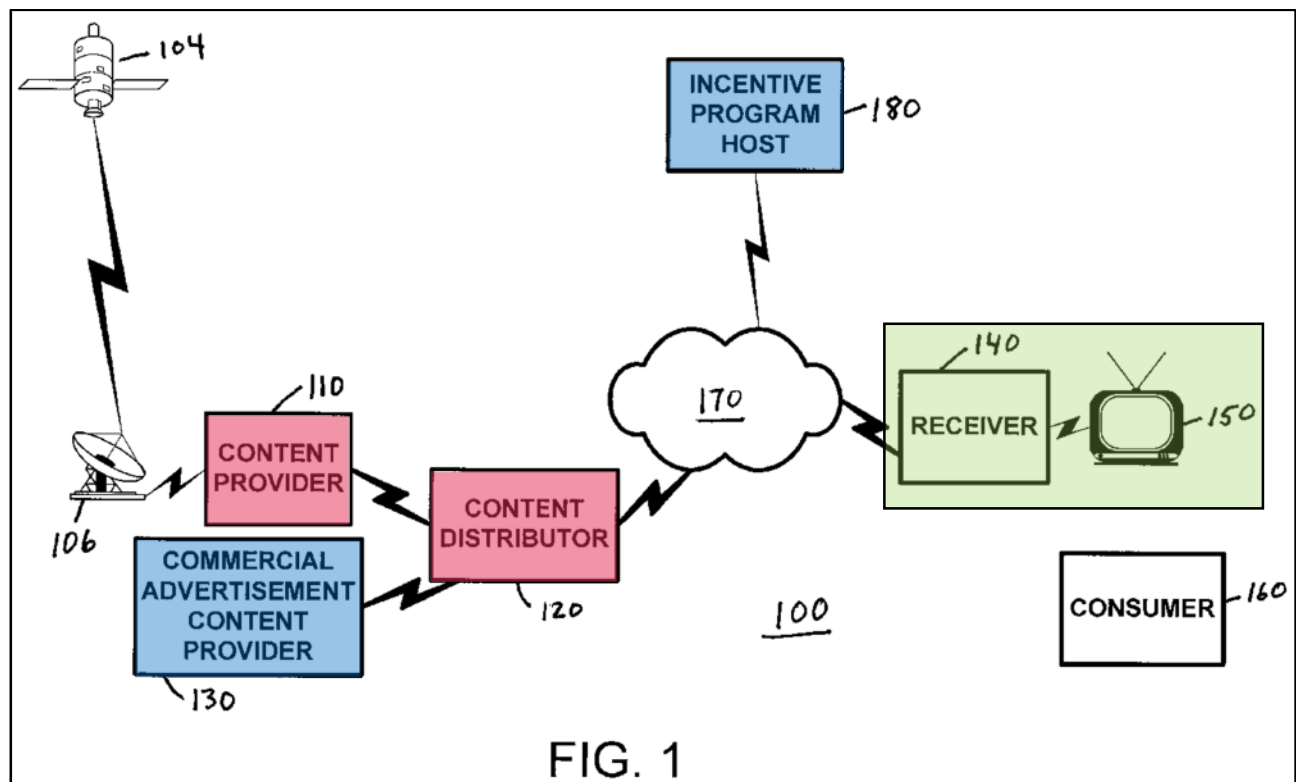
C. Claim 1

Ray combined with Nolan renders claim 1 obvious. EX1002, ¶¶79-132.

1. [1.pre]

Ray discloses this preamble. EX1002, ¶¶81-85.

Ray discloses “content provider” 110 and “content distributor” 120 (also called “broadcaster” 120) (collectively, *a moving image data delivery system*, annotated red below). EX1004, ¶25.¹



EX1004, Fig. 1, ¶¶25-29.² These combined entities are a *moving image data*

¹ EX1005, 6 (“cable operator” broadcaster), 7 (“Content Provider”), 15 (“broadcaster”).

² nn.1, 3-4, 6-10.

delivery system at least because they deliver the moving image data of television programs to consumers. §IV(C)(2) (limitation 1.a). EX1002, ¶82.

Ray discloses “incentive program host” 180 and “commercial advertisement content provider” 130 (also called “advertiser” 130) (collectively, an *advertising image data delivery system*, annotated blue above). EX1004, ¶25, ¶28.³ Host 180 combined with advertiser 130 is an *advertising image data delivery system* at least because advertiser 130 delivers commercials (*advertising image data*) to broadcaster 120. EX1004, ¶25 (“the broadcaster can obtain commercial content from an advertiser 130”).⁴ These combined entities also are an *advertising image data delivery system* because: 1) host 180 manages the program under which commercials are delivered to consumers with the ability for the consumer to earn points for viewing the commercials; and 2) they communicate with each other about the advertisements. EX1004, ¶49 (the host is the “central clearinghouse for creating, processing, and/or redeeming loyalty programs”), Fig. 10 (steps 2a, 2b).⁵ It is appropriate to identify these entities collectively as this *system* because the plain meaning of “system” includes a distributed system, and because these two

³ EX1005, 7 (“Loyalty Platform Provider Host,” “Advertiser”).

⁴ EX1005, 6-7 (Advertiser’s commercials delivered via “forward channel,” which includes broadcaster), 8 (“Advertiser...provide[s] commercial”), 20 (“Advertiser provides a commercial”).

⁵ EX1005, 6-7 (host is “clearinghouse”).

entities have related functionality regarding advertising. EX1004, ¶25 (advertiser 130 provides commercials), ¶29 (host 180 provides points for watching the commercials), ¶28 (host 180 receives feedback on the commercials), ¶46 (advertiser reviews the feedback).⁶ EX1002, ¶83.

Ray further discloses receivers 140 and televisions 150 (annotated green above) (collectively, *a plurality of moving image viewing apparatuses*). EX1004, ¶26.⁷ EX1002, ¶84.

As shown in Figure 1, the *moving image data delivery system* (red) is *in communication with the plurality of moving image viewing apparatuses* (green) because it distributes programming content to them. §IV(C)(2) (limitation 1.a). It also is *in communication with the advertising image data delivery system* (blue) at least because advertiser 130 delivers commercials to broadcaster 120, as described above. EX1002, ¶85.

2. [1.a]

Ray discloses this limitation. Ray's content provider 110 "provides non-commercial program content to a broadcaster 120." EX1004, ¶25.⁸ Such content

⁶ EX1005, 9 (step 7, points from host and feedback to host), 12 (feedback by completing questionnaire), 21 ("Feedback gathered").

⁷ EX1005, 5 (defining "Viewing Device").

⁸ EX1005, 6 ("Content Provider" is a "[p]rovider of content for forward channel," such as a "TV network"), 7 ("content provider" distributes via "forward channel"), 5 (describing "Forward channel").

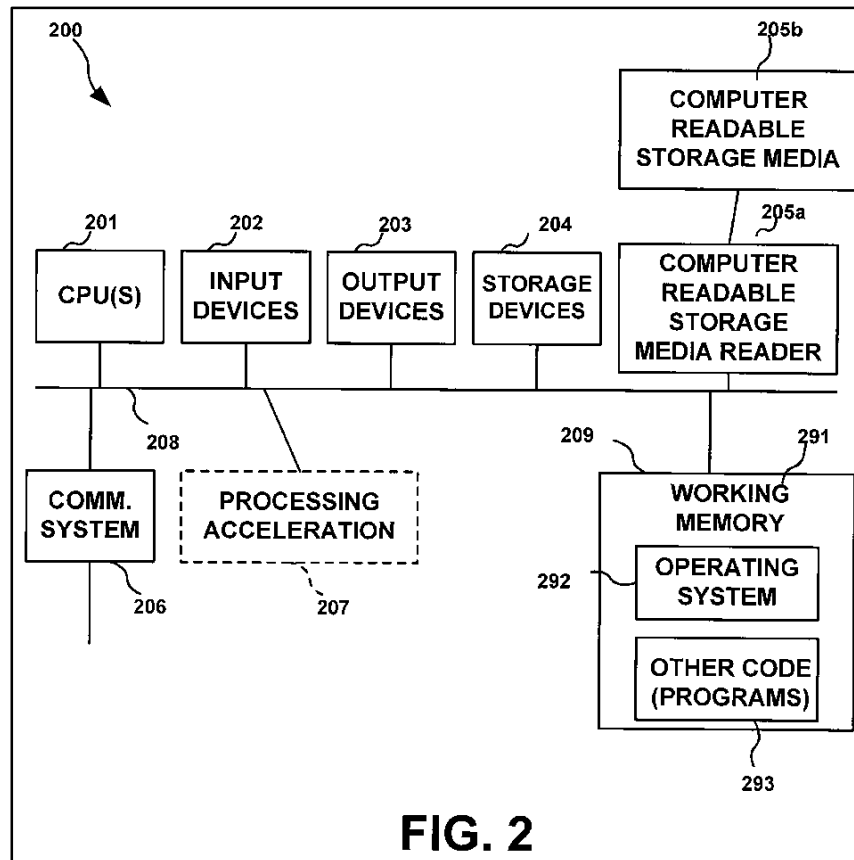
includes “aerial television broadcast” content, “cable and satellite television feeds,” “sporting event[,] movie,” and “on-demand video streaming” content (all *digital moving image data of television programs*). EX1004, ¶¶32, ¶49.⁹ Broadcaster 120 transmits such content “to receivers operated by consumers, such as receiver 140 operated by consumer 160.” EX1004, ¶26.¹⁰ A POSITA would have understood that consumers view the content using receivers 140 and televisions 150 (the *television programs are to be viewed by [via] the moving image viewing apparatuses*). EX1002, ¶¶86-87.

Ray discloses that the elements of Figure 1, including content provider 110, can be implemented as shown in Figure 2. EX1004, ¶30.¹¹ Figure 2 includes “storage devices” 204, “computer readable storage media” 205b, and “memory” 209 (collectively and each individually a *storage*):

⁹ EX1005, 5 (describing “Forward channel,” including “on-demand video streaming,” “aerial TV broadcast, cable and satellite TV feeds”).

¹⁰ EX1005, 5 (“Viewing Device[s]” for “displaying [a] broadcast video signal”); “Forward channel” broadcasts), 7 (forward channel), 21 (“[c]ontent is delivered to ‘viewing device’”).

¹¹ EX1005, 3-4 (any “module” can be implemented as “software, hardware, firmware or any combination of the three;” any “module” can be software, and any software can be “part of a larger program;” (“division of the modules...are not mandatory or significant;” “the mechanisms that implement the invention...may have different...divisions”).



EX1004, Fig. 2, ¶30. A POSITA would have understood that content provider 110 necessarily (inherently) would have stored the *television program* content described above in such *storage* media at least temporarily because otherwise it would not be able to provide such content to broadcaster 120 as disclosed.

EX1002, ¶88.

It would have been obvious to a POSITA for the content provider 110 to store such *television program* content in the disclosed *storage* media at least as part of implementing the disclosed functionality of transmitting that content to broadcast 120. EX1004, ¶25. EX1002, ¶89.

3. [1.b.i]

Ray discloses and renders obvious this limitation. EX1002, ¶¶90-94.

Ray discloses that a consumer 160 exchanges “credits”/“points” (*electric data*) to view *television program* content. EX1004, ¶47 (“consumer watching a movie could redeem incentive program credit to obtain transmission of behind-the-scenes content”; “consumer watching a sporting event could redeem the incentive program credits to obtain continued broadcast coverage of highlights or interviews from the event”).¹² A season finale is *one of the digital moving image data of television programs*. Ray refers to the “credits” as “coupons” and “points,” which also are *electric data* for the same reasons as the “credits.” EX1004, ¶34.¹³ EX1002, ¶91.

Television 150 (part of the *moving image viewing apparatuses*) *allow[s]* the *display the television program* because “the consumer can view the content on display 150.” EX1004, ¶26.¹⁴ The redeemed content is provided *to one of the moving image viewing apparatuses* because it is viewed by the consumer, as

¹² EX1005, 2 (“[v]iewers can redeem accrued value/points for other content”), 14 (“[w]hen a customer does something the broadcaster wants (i.e. watch commercials) then they get something they want (i.e. premium content”), 15 (“Person is watching show”), 16 (“[Redemption] examples: Person watches X% of the commercials (or fixed number) and [then] can go ... get an early release of the season finale”), 17 (“Watch T.V.”).

¹³ EX1005, 6 (“coupons”), 21 (“coupons”).

¹⁴ EX1005, 5 (“displaying broadcast”).

described above. The points *denot[e] a right of viewing the television program* because the points allow access to the content, as described above. In redeeming the credits/points (*electric data*) for selected content, the consumer offers and gives (*presents*) the credits/points in exchange for viewing the selected content, as described above. §III(D)(1) (“presentation” construction). EX1002, ¶92.

The software/hardware of broadcaster 120 that transmit such content to the consumers is the *first controller* of this limitation. EX1004, ¶26 (broadcaster transmission);¹⁵ §III(D)(2) (“controller” construction). Ray discloses that these entities have such software and hardware, such as “processor 201” and “programs” 293 of Figure 2, which is an example implementation of any entity from Figure 1. EX1004, ¶30.¹⁶ A POSITA would have understood that broadcaster 120 necessarily (inherently) includes such software and/or hardware (the *first controller*) to implement the disclosed functionality of distributing such content to consumers. EX1002, ¶93.

It would have been obvious to a POSITA to implement the functionality described above in the software/hardware (the *first controller*) of content distributor/broadcaster 120. A POSITA could have done so by, for example,

¹⁵ EX1005, 5 (“Viewing Device[s]” for “displaying [a] broadcast video signal”); “Forward channel” broadcasts), 7 (forward channel), 21 (“[c]ontent is delivered to ‘viewing device’”).

¹⁶ n.11.

having broadcaster 120 distribute the content redeemed with points to the appropriate consumer using the same mechanism by which the broadcaster distributes other content to the consumer, such as a “cable...television feed[.]” EX1004, ¶49.¹⁷ Broadcaster 120 distributes content to particular consumers because, for example, Ray discloses “Pay Per View Content” (distributed only to paying consumers), and “on-demand video streaming” (distributed to a customer by request). EX1004, ¶49.¹⁸ Motivation for such implementation arises from a desire to implement Ray’s disclosed functionality, described above, in the most logical and straightforward manner. Doing so would lead a POSITA to implement distribution of the content in the broadcaster 120 because the content provider would provide the content at issue to the broadcaster, which would distribute it to the consumers, as disclosed in Ray and as required for limitation 1.a. EX1002, ¶94.

4. [1.b.ii]

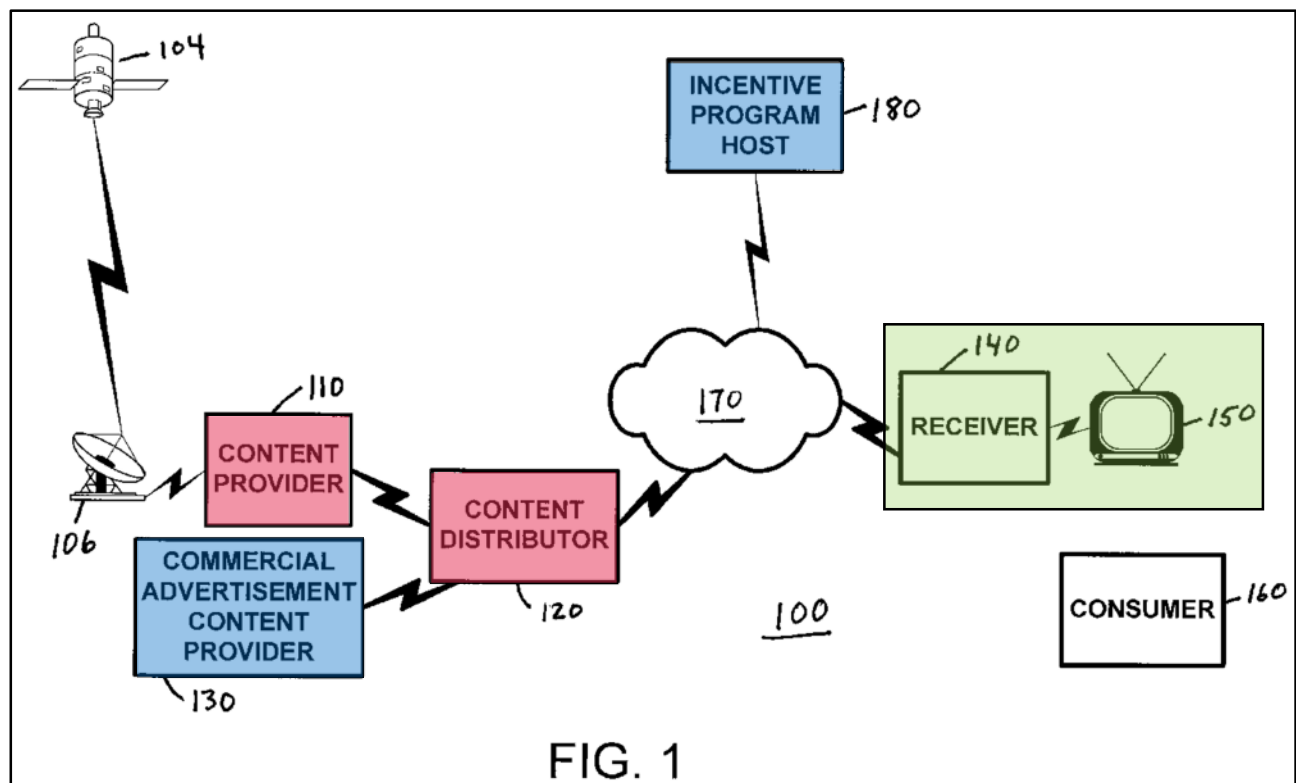
Ray discloses and renders obvious this limitation. EX1002, ¶¶95-102.

Ray discloses that host 180 *issues* credits/points (*electric data*) to a consumer *in exchange* for the consumer watching a commercial (*a commercial message view by the moving image viewing apparatus*). §IV(C)(3) (limitation 1.b.i); EX1004, ¶29 (the viewer receives “some form of value in return for playing

¹⁷ EX1005, 5 (broadcaster “feeds”).

¹⁸ EX1005, 2 (“Pay Per View”), 5 (“on demand video streaming”).

a stored commercial” and “some form of value when the consumer actually does watch the recorded commercials”; “the incentive program host can then credit the consumer’s incentive program account with a corresponding value,” such as “a point for every commercial that is viewed”), ¶32 (“reward the consumer for playing commercial[s]”), ¶33 (“when a consumer does play a commercial, then the consumer’s account can be credited with an incentive program credit”), ¶34 (“the consumers incentive account could be credited with a predetermined number of points that are awarded for watching a television commercial”).¹⁹



¹⁹ EX1005, 1 (“points...based on the commercials they view”), 2 (points for viewing commercials), 14, 16.

EX1004, Fig. 1, ¶¶25-29.²⁰ EX1002, ¶96.

The credits/points (*electric data*) are *issued to* the consumer's "incentive program account." EX1004, ¶29 ("provide a consumer's account with a point for every commercial that is viewed"), ¶33 ("the consumer's account can be credited with an incentive program credit").²¹ The credits/points are *issued by* incentive program host 180 (part of *the advertising image data delivery system*). EX1004, ¶29 ("the incentive program host can then credit the consumer's incentive program account"; "the incentive program might provide a consumer's account with a point for every commercial that is viewed").²² EX1002, ¶97.

Petitioner identifies the consumer's "incentive program account" (*i.e.*, points account) as part of the *moving image viewing apparatus*. The consumer uses his or her receiver 140 and TV 150 (the other parts of the *moving image viewing apparatus*) to redeem the account's *electric data* (credits/points) for certain content for the receiver/television. §IV(C)(3) (limitation 1.b.i) (exchanging points for content); EX1005, 13 (consumer accessing "Points Program" via TV), 8 ("[v]iewer...links" account to his or her "Viewing Device"). EX1002, ¶98.

It also would have been obvious to a POSITA to have the consumer's

²⁰ nn.1, 3-4, 6-10.

²¹ EX1005, 6 ("Loyalty Account" with "loyalty points").

²² EX1005, 9 (step 7, points from host), 6 (host is "clearinghouse for creating, processing and redeeming loyalty points").

account be part of the *moving image viewing apparatus* by, for example, enabling the user to (as Ray discloses) redeem *electric data* (credits/point) in the account to obtain content for the receiver/television using account information (*e.g.*, balance and authentication information) stored on the consumer's receiver 140. §IV(C)(2) (limitation 1.a) (storage for every system element). Ray discloses such storing at least temporarily. EX1005, 13 (consumer accessing "Points Program" via TV). Motivation to do so arises from the account being tied to the consumer, who earns points for the account and redeems them. §IV(C)(4) (limitation 1.b.ii) (earning points), §IV(C)(3) (limitation 1.b.i) (redeeming points). More motivation arises from Ray's disclosure of the user using the account via his or her TV, described above. EX1005, 13. These things would motivate a POSITA to at least keep a copy of the account on the consumer's equipment for ease of at least display and access. EX1002, ¶99.

Host 180 *issues* credits/points (*electric data*) to a consumer's "incentive program account" *without* either content provider 110 or broadcaster 120 (collectively, the *moving image data delivery system*) acting as an *intermediary*, as described above. EX1004, ¶29, ¶¶32-34.²³ Ray's Figure 1 also shows that host 180 communicates with receiver 140 via network 170 without going through content

²³ n.19.

provider 110 or broadcaster 120. And there is no indication that content provider 110 or broadcaster 120 necessarily would be involved in host 180's issuance of points to a consumer's account. A POSITA therefore would have understood content provider 110 and broadcaster 120 do not act as intermediaries for this issuance of credits/points. EX1002, ¶100.

The commercials (*commercial messages*) are *provided by* advertiser 130 (part of *the advertising image data delivery system*; §IV(C)(1) (preamble 1.pre)). EX1004, ¶25 (“the broadcaster can obtain commercial content from an advertiser 130”).²⁴ EX1002, ¶101.

It also would have been obvious to a POSITA for host 180 (part of *the advertising image data delivery system*) to *provide* the commercials. Ray discloses that a consumer can “register his or her commercial preferences” and “incentive program [host 180] receives a set of selected categories from the consumer.” EX1004, ¶35, ¶37.²⁵ Then, “a broadcaster or other entity can use the consumer's profile to select commercials to transmit to the consumer.” EX1004, ¶38.²⁶ It would have been obvious to a POSITA to have that “other entity” be host 180 because host 180 receives and stores the consumer's selected categories, and

²⁴ n.4.

²⁵ EX1005, 1 (“commercials based on...personal preferences”), 3 (“preferences regarding...advertisements”).

²⁶ n.25.

therefore is a logical choice of an entity to perform the disclosed selection of commercials based on those selected categories. EX1004 ¶42 (“consumer’s profile is stored on a database at the incentive program host” 180).²⁷ Motivation to have host 180 do so arises from a desire to apply the consumer’s selected categories at the same entity where they are stored, as a matter of simplicity and efficiency. Additionally, a POSITA would have understood, for the reasons above, that host 180 can receive selected commercial content from advertisement content provider 130 and deliver it to viewer devices 140/150. EX1002, ¶102.

5. [1.b.iii]

Ray discloses and renders obvious this limitation. Ray discloses that *the advertising image data delivery system issues credits/points (the electric data) to the moving image viewing apparatus in exchange of viewing commercial message.* §IV(C)(4) (limitation 1.b.ii). EX1002, ¶¶103-104.

Ray also discloses that such issuance of points does not involve *electric payment made to* content provider 110 or content distributor 120 (collectively, *the moving image data delivery system*). EX1004, ¶29 (“the incentive program host can then credit the consumers incentive program account”).²⁸ Ray does not disclose in this passage or elsewhere that this transaction involves *electric payment made to*

²⁷ n.5.

²⁸ n.19.

the moving image data delivery system. EX1004. A POSITA also would have understood this transaction to be a stand-alone transaction, not coupled with a payment to the content provider 110 or content distributor 120. EX1002, ¶105.

A POSITA also would have understood that Ray discloses issuance of points that does not involve payment to the *moving image data delivery system*. For example, Ray discloses that the issuance of points to a consumer results from a consumer watching a commercial that is points eligible. EX1004, ¶29.²⁹ Ray also discloses that the broadcaster “charge[s]” an advertiser for “transmitting” a commercial. EX1004, ¶40 (“a broadcaster could charge an advertising company more for transmitting the beverage commercial”).³⁰ But transmitting a commercial does not guarantee that a consumer will watch the commercial because the consumer may “fast forward through a commercial.” EX1004, ¶44.³¹ Thus, there is not a one-to-one relationship between transmission of a commercial and a consumer viewing the commercial. A POSITA therefore would have understood that Ray discloses issuance of points to a consumer decoupled from any electric payment to the broadcaster (or content provider). EX1002, ¶106.

Ray likewise discloses that advertiser payments to the broadcaster vary

²⁹ n.19.

³⁰ EX1005, 16 (“broadcaster can charge” for commercials); 20 (“advertisers...pay...advertising rates” to broadcasters).

³¹ EX1005, 16 (“Person...skips it”).

“based on how [the advertiser] wants their [commercials] to count.” EX1005, 16.

For example, the broadcaster “can charge a flat fee,” which differs from a “pay by views” option. EX1005, 16. The “flat fee” scenario therefore is not based on commercial views, again excluding a one-to-one relationship between commercial transmission and commercial views. Again, Ray discloses issuance of points to a consumer decoupled from any electric payment to the broadcaster (or content provider). EX1002, ¶107.

It also would have been obvious to a POSITA to issue credits/points (*electric data*) to the consumer without making electronic payment to the *moving image data delivery system* for the same reasons. For example, it would have been obvious to a POSITA to make any *electric payment* to the content provider or broadcaster (collectively, the *moving image data delivery system*) separately from issuing points to a consumer because, as Ray discloses, the *electric payment* can be based on a different event (transmitting certain commercials) than the points issuance (the consumer watching a commercial). As Ray discloses and as described above, the consumer may not watch a transmitted commercial. Motivation to make any such *electric payment* separately from issuance of points arises at least from this distinction. More motivation arises from a desire to decouple making payments to content providers or broadcasters and issuing points to consumers for the sake of organization, simplicity, and scalability, because such

transactions involve different monetary value (credit versus cash), different recipients (broadcasters versus consumers), and different events (transmission versus viewing). EX1002, ¶108.

Moreover, even in the embodiment where a broadcaster is “[paid] by views,” described above, it still would have been obvious to a POSITA to pay the broadcaster at a different time than issuing points to a consumer. For example, a POSITA would be motivated to issue points to a consumer soon after a commercial view, in order to incentivize the consumer to watch commercials. Such an incentive does not apply to the broadcaster, and it would have been obvious to a POSITA to instead pay the broadcaster monthly, for instance, consistent with business norms. EX1002, ¶109.

Furthermore, a POSITA would have been motivated to pay the content broadcaster 120 (part of *the moving image data delivery system*) after receipt of a certain report from *the moving image data delivery system* rather than upon issuing points to a consumer, as described below for limitation 1.c, incorporated here by reference. EX1002, ¶110.

6. [1.c]

Ray combined with Nolan renders this limitation obvious. EX1002, ¶¶111-132.

a. The Report

Ray discloses that consumers may redeem credits/points (*electric data*) for “premium content” such as the “season finale.” §IV(C)(3) (limitation 1.b.i). Content provider 110 “provides non-commercial program content to a broadcaster 120,” which would include such premium content. EX1004, ¶25.³² Ray also discloses that broadcaster 120 distributes regular content to consumers. EX1004, ¶26, Fig. 1.³³ The consumer redeems credits/points, for example, when “watching a movie” or “watching a sporting event,” which are provided by broadcaster 120, as described above. EX1004, ¶47.³⁴ Ray therefore implicitly discloses that the consumer’s redemption of credits/points for premium content involves *presenting*, either directly or indirectly, the credits/points (*electric data*) to broadcaster 120 (part of *the moving image data delivery system*). §III(D)(1) (“presentation” construction). A POSITA also would have understood that this is necessarily (inherently) the case because, otherwise, the broadcaster 120 would not know which consumers are entitled to the premium content or to which consumers it should broadcast such content. EX1002, ¶112.

It also would have been obvious to a POSITA to implement the consumer’s

³² n.8.

³³ n.10.

³⁴ EX1005, 2 (“Viewers can redeem...points”); n.12.

redemption of credits/points (*electric data*) for premium content by having the consumer present the credits/points to broadcaster 120 (part of *the moving image data delivery system*). The POSITA could have done so by having the broadcaster 120 receive from the consumer an indication that the consumer wished to use its credits/points to obtain access to the premium content. Doing so would have been within the skill and knowledge of a POSITA, would have led to predictable results, would have created a reasonable expectation of success, would have been compatible with Ray, and would have been a mere design choice. For example, Ray discloses that broadcaster 120 already is equipped to transmit custom content to a particular consumer. EX1004, ¶38 (the broadcaster can use the consumer's profile to select commercials to transmit to the consumer).³⁵ And broadcaster 120 already supports "pay-per-view" and "video on demand" content, which a POSITA would have understood involves the broadcaster receiving content selection and payment from the consumer. EX1005, 16. Broadcaster 120 therefore would have readily supported providing selected content to a consumer upon the consumer presenting appropriate credits/points (*electric data*). Motivation to do so arises from Ray's disclosure that broadcaster 120 provides content to the consumer, described above, which would lead a POSITA to select broadcaster 120 as the

³⁵ n.25.

entity to which the consumer presents credits/points (*electric data*) to obtain premium content. EX1002, ¶113.

Furthermore, Ray discloses generating and presenting “reports” related to its advertising campaigns. EX1004, ¶46 (“Reports may be generated from the consumers’ feedback. Thus, advertisers may periodically review the results of their advertising campaigns, including how many people viewed their advertisement...as well as feedback from viewers on the effectiveness of their advertising campaigns.”); EX1005, 1 (“reports are generated concerning advertisement effectiveness”), 3 (“Reporting”). EX1002, ¶114.

This limitation’s recitation of the report’s content (“*the report indicating that the moving image data delivery system is presented with the electric data*”) is printed matter that is recited “for what it communicates” and is not “functionally or structurally related to [any] associated physical substrate” of the report. *In re Distefano*, 808 F.3d 845, 850-51 (Fed. Cir. 2015). This claim language therefore is not entitled to patentable weight. *Id.* EX1002, ¶117.

Nonetheless, Nolan discloses a Facilitator 101 and Provider 102. §IV(B). Nolan’s “Provider” “provides television programming,” where “programming” refers to “various channels that offer content directly to the public” such as “cable, satellite, broadband or the public airwaves.” EX1006, ¶87. Nolan’s Provider therefore is akin to Ray’s broadcaster 120 and is a *moving image data delivery*

system. Nolan's "Facilitator 101 contracts with the other parties...to establish relationships that are a benefit to all" and "instructs [the Provider] to run the [commercial] on a designated channel." EX1006, ¶78, ¶107, ¶109 (Facilitator would "contract with the Provider...to deliver the advertising message"). Nolan's Facilitator therefore is akin to Ray's incentive program host 180 and advertiser 130, and is an *advertising image data delivery system*. EX1002, ¶118.

Nolan's Provider 102 generates a report of commercial views and provides that information to its Facilitator 101. EX1006, ¶80 ("Facilitator 101 receives the capture information from the Provider 102 that summarizes the information pertinent to the Customers 104 reached, the results of the interactive communication, and other relevant data."). The disclosed summary provided by the Provider 102 with various information is a *report* to the Facilitator 101 because, for example, it is a summary of information provided to another entity. EX1002, ¶119.

It would have been obvious to a POSITA for Ray's broadcaster 120 (part of *the moving image data delivery system*) to *present* to host 180 (part of *the advertising image data delivery system*) a *report indicating that* broadcaster 102

was presented with credits/points (*electric data*).³⁶ A POSITA could have done so by incorporating into Ray the functionality of Nolan described above where the entity that provides video to the consumer (Nolan's Provider 102 and Ray's broadcaster 120) presents a report to the advertisement program organizer (Nolan's Facilitator 101 and Ray's host 180). A POSITA also could have done so by having Ray's broadcaster 120 include in the report "other relevant data" (as disclosed by Nolan, ¶180) in the form of points redeemed by consumers for premium content. The broadcaster 120 would readily be able to do so because Ray discloses, and it would have been obvious, that the consumer presents credits/points to broadcaster 120 to redeem them for premium content. EX1002, ¶120.

Doing so would have been within the skill and knowledge of a POSITA, would have led to predictable results, would have created a reasonable expectation of success, would have been compatible with Ray, and would have been a mere design choice. For example, Nolan and Ray disclose reports related to advertising activity, described above, confirming that the generation and presentation of such a report would be readily implementable. EX1002, ¶121.

Motivation to do so first arises from Ray's disclosure that consumers redeem

³⁶ Petitioner interprets the claim language "is presented with the electric data" to include "was presented with the electric data" because the recited "report" necessarily would include information only on past presentations of electric data.

credits/points for premium content, such as “pay-per-view” content, as described above. §IV(C)(3) (limitation 1.b.i); EX1005, 16. The credits/points presented by the consumer have no value to the broadcaster 120 except to the extent that the broadcaster uses them to seek reimbursement from the entity that issued the points (host 180). §IV(C)(4) (limitation 1.b.ii) (host 180 issues the credits/points). The broadcaster doing so makes sense because the broadcaster provided content of value (*i.e.*, the premium content described above) to the consumer, but received no compensation from the consumer for that content other than credits/points. Thus, a POSITA would be motivated to have the broadcaster 120 report to the host 180 the credits it received from the consumers in order to seek compensation from host 180. Otherwise, the broadcaster would have little to no incentive to provide the consumer with such premium content. Further motivation arises from Nolan’s disclosure of payments from its Facilitator 101 (akin to Ray’s host 180) to its Provider 102 (akin to Ray’s broadcaster 120) for the cost of services provided by the Provider, described in the next section. EX1006, ¶107 (“Facilitator distributes the funds to itself and the Providers on behalf of the Customer”), ¶113 (“Facilitator compensates the Provider for the cost of the services”). This disclosure would motivate a POSITA to pay broadcaster 120 for its services, including distributing some amount of premium content. In turn, a POSITA would be motivated to have broadcaster 120 report how much of such content is distributed for credits/points

so that it can be paid proportionally. Additional motivation arises from Ray's disclosure that broadcaster 120 can "charge" for broadcasting commercials. EX1004, ¶40 ("broadcaster...determine[s] how much to charge advertisers for certain types of commercials"; "broadcaster could charge...for transmitting the beverage commercial").³⁷ This disclosure would motivate a POSITA to have the broadcaster 120 charge, and receive payments, for its other services of value, including providing the premium content described above. In turn, a POSITA again would be motivated to have the broadcaster 120 report how much of such content is distributed for credits/points so that it can be paid proportionally. More motivation arises from Nolan's and Ray's use of reports, described above, to describe the results of advertising activity. EX1002, ¶122.

b. The Electric Payment

As described above, Ray discloses that its content distributor/broadcaster 120 can "charge" for broadcasting commercials. EX1004, ¶40 (quoted above). Ray therefore implicitly discloses that broadcaster 120 receives *payment* for transmitting commercials. EX1002, ¶123.

Further, Nolan discloses that its "Facilitator pays the Provider 102" for the Provider's services. EX1006, ¶77, ¶107 ("Facilitator distributes the funds to itself and the Providers on behalf of the Customer"), ¶113 ("Facilitator compensates the

³⁷ n.30.

Provider for the cost of the services”), Fig. 18 (“Facilitator compensates Provider” (step 916)). The Provider’s services include providing “the media product that the Customer 104 chooses,” “deliver[ing] the advertising and interactive requests” to the Customer, “receiv[ing] and compil[ing] the data from the Customer,” and “giv[ing] the collected data” to the Facilitator. EX1006, ¶77, ¶113; EX1006, ¶109 (“The Provider would collect the [interactive response] data from the Customer...and would give the data to the Facilitator”). Nolan’s Facilitator 101 is akin to Ray’s host 180, and Nolan’s Provider 102 is akin to Ray’s broadcaster 120, as established above. EX1002, ¶124.

It would have been obvious to a POSITA to have Ray’s advertiser 130 or host 180 (collectively, the *advertising image data delivery system*) provide a *payment* to Ray’s broadcaster 120 (part of the *moving image data delivery system*). A POSITA could have done so by incorporating into Ray the functionality of Nolan described above where Nolan’s Facilitator (akin to Ray’s host 180 and advertiser 130) pays Nolan’s Provider (akin to Ray’s broadcaster 120). Specifically, a POSITA could have adopted the Nolan functionality described above in the Ray system such that Ray’s host 180 or advertiser 130 provided a *payment* to Ray’s broadcaster 120. EX1002, ¶125.

Motivation to do so arises first from Ray’s disclosure that broadcaster 120 charges an advertiser for transmitting commercials to consumers, described above.

A POSITA therefore would have been motivated to pay broadcaster 120 for this service and its other services of value, including its providing premium content to consumers for credits/points. A POSITA likewise would have understood that broadcaster 120 would need to be paid in order to broadcast such content.

§IV(C)(2) (limitation 1.a) (describing the broadcaster's broadcasting function). A POSITA likewise would have understood that broadcaster 120, operating as a business, would need to be paid for its service of providing the premium content to a consumer. §IV(C)(4) (limitation 1.b.ii) (extra content). A POSITA therefore would be motivated to pay broadcaster 120 for such services. EX1002, ¶126.

It further would have been obvious to a POSITA for such payment to be *in exchange* for the report described in the previous section because the report shows that a consumer redeemed credits/points with the broadcaster 120, indicating that that broadcaster 120 needs to receive payment for the premium content provided when those credits/points were redeemed. The motivations identified above also apply here. EX1002, ¶127.

It also would have been obvious to a POSITA to have Ray's advertiser 130 or host 180 make the payment to Ray's broadcaster 120 electronically (*i.e.*, an *electric payment*). For example, both Nolan and Ray disclose *electric payments*. Nolan discloses one entity crediting the account of another. EX1006, ¶112 ("The Facilitator would credit the account of the Customer toward their billing

obligation.”), ¶113 (“a credit goes towards their billing statement”). Ray discloses host 180 crediting a consumer’s cash account, which a POSITA would have understood is performed electronically rather than physically. EX1004, ¶29 (host credits consumer for watching commercials), ¶34 (“the consumer could be credited with monetary value, such as cash in a cash account”).³⁸ A POSITA could have made the payment electronically using any well-known type of electronic payment methods that were commonplace by the ’391 patent’s priority date (2006). EX1007 (Modi, filed Aug. 26, 2004), 1:21-22 (“Currently, several Internet-based money transfer services are in operation.”); EX1006 (Nolan), ¶10 (“Internet banking” is a “[p]opular service[]”). Nolan does not elaborate on how its electronic payments are accomplished, confirming that such methods were well-known. A POSITA would have been motivated to make such payment electronic (*electric*) in the interests of speed, convenience, security, and record-keeping. More motivation comes from the disclosures of Nolan and Ray described above, which would have led a POSITA to implement a similar *electric payment*. Additional motivation arises from Ray’s disclosure of implementing its system using computers. EX1004, ¶¶50-51.³⁹ EX1002, ¶128.

A POSITA would have understood that the *electric payment* in Nolan

³⁸ EX1005, 17 (“Incentives” with dollar sign).

³⁹ n.11.

necessarily (inherently) involves software/hardware (a *controller*) in the Provider that accesses an account that receives the payment because Nolan contemplates electronic payments, as described above. §III(D)(2) (“controller” construction). Otherwise Nolan’s Provider would not be able to electronically access the payment funds as Nolan contemplates. Ray’s broadcaster 120 likewise would necessarily (inherently) include such a *controller* for the same reason. This *controller* is *adapted to receive the electric payment* because it accesses an account that receives the payment. §III(D)(3) (construction of that claim language). It also would have been obvious to a POSITA to have such a *controller* in order to access the payment funds. Motivation to do so arises from a desire to access the funds electronically, as was well-known in 2006. EX1002, ¶129.

This *controller* would be a *second controller* because its functionality would differ from the functionality of the *first controller* (distributing video to consumers). §IV(C)(3) (limitation 1.b.i). For example, at least the software/firmware (if not also the hardware) that receives the *electric payment* necessarily (inherently) would be different than the software/firmware that distributes video given the differences in functionality, resulting in distinct *controllers*. §III(D)(2) (“controller” construction). It also would have been obvious to a POSITA to implement this *controller* function separately from the *first controller*, as different software, making it a *second controller*. Motivation for a POSITA to do so arises

from the differences in functionality with the *first controller*, which would lead a POSITA to implement the controllers separately in software/hardware. More motivation arises out of Ray’s disclosure of “implement[ing]...sub-elements within a system,” which would lead a POSITA to separate the implementations as distinct sub-elements (distinct *controllers*), especially for the electric payment described above.⁴⁰ EX1002, ¶130-131.

All of the functionality described above would have been within the skill and knowledge of a POSITA, would have led to predictable results, would have created a reasonable expectation of success, would have been compatible with Ray, and would have been a mere design choice. EX1002, ¶132.

D. Claim 2.

Ray combined with Nolan renders claim 2 obvious. §IV(C) (claim 1). Ray discloses and renders obvious that each of the *first controller* and *second controller* are included in content distributor/broadcaster 120. §IV(C)(3) (limitation 1.b.i, *first controller*), §IV(C)(6)(b) (limitation 1.c, *second controller*). Ray discloses that broadcaster 120 can be implemented as the *computer* of Figure 2. EX1004, ¶30; EX1004, ¶49 (broadcasting via “cable and satellite television feeds, as well as on-demand video streaming of content over a network such as the Internet”), ¶50 (the

⁴⁰ n.11.

system may be implemented with computer code).⁴¹ Ray also discloses and renders obvious that broadcaster 120 (a *computer*) includes *the functions* of the *first and second controllers*. See §IV(C)(3) (limitation 1.b.i, *first controller*), §IV(C)(6)(b) (limitation 1.c, *second controller*). EX1002, ¶¶133-135.

E. Claim 9.

Ray combined with Nolan renders claim 9 obvious. See §IV(C) (claim 1). EX1002, ¶¶136-141.

Ray discloses that each element of its system may be implemented as the computer of Figure 2. EX1004, ¶30.⁴² Ray also discloses that computer 200 has “extensive flexibility and configurability”; for example, “a single architecture might be utilized to implement one or more servers.” EX1004, ¶31.⁴³ Broadcaster 120 is a server because it serves content to consumers (§IV(C)(2) (limitation 1.a)) and that host 180 is a server because it can, for example, provide the services of “register[ing] the consumer as a participant in the incentive program,” “obtain[ing] feedback from the consumer,” and performing “redemption of incentive credits.” EX1004, ¶28, ¶49 (in addition to “creating, processing, and/or redeeming loyalty programs”).⁴⁴ A POSITA also would have understood that providers 110 and 130

⁴¹ n.11; n.9.

⁴² n.11.

⁴³ n.11.

⁴⁴ nn.5-6.

are servers because each provides content. EX1004, ¶25 (“provider 110 provides non-commercial program content” and advertiser 130 provides “commercial content”).⁴⁵ A POSITA therefore would have understood that Ray discloses that host 180 (part of the *advertising image data delivery system*) can be implemented in broadcaster 120 (part of the *moving image data delivery system*) as “a single architecture,” and commercial provider 130 (part of the *advertising image data delivery system*) can be implemented in provider 110 (part of the *moving image data delivery system*) as a “single architecture” (*the advertising image data delivery system is integrated into the moving image data delivery system*). EX1002, ¶138.

Likewise, Nolan discloses that its Facilitator 101 can be integrated into its Provider 102. EX1006, ¶84 (“Facilitator/Provider 105 establishes the means to deliver the media content to the Customer 104”), ¶86 (“Facilitator/Provider 105 would offer services as the Provider 102 to the Customer 104”), ¶87 (“Facilitator[/]Provider performs a dual role of the Facilitator and either the Television Programming Provider or the Internet Provider or both”), Fig. 2 (“Facilitator/Provider 105”). Nolan’s Facilitator 101 is akin to Ray’s host 180 and Nolan’s Provider 102 is akin to Ray’s broadcaster 120. §IV(C)(6)(a) (limitation

⁴⁵ n.4; n.8.

1.c). EX1002, ¶139.

It would have been obvious to a POSITA to integrate Ray's host 180 into broadcaster 120 and Ray's commercial provider 130 into Ray's provider 110. A POSITA could have integrated host 180 into broadcaster 120 by implementing Nolan's disclosure of integrating similar entities, described above. A POSITA could have integrated commercial provider 130 into provider 110 with a similar implementation. Such integration would be readily performable because Ray discloses that each entity in its system can be implemented as the same computer shown in Figure 2. EX1004, ¶30.⁴⁶ In other words, Ray discloses each entity can be implemented such that it already includes the components (*e.g.*, hardware) necessary to implement any other entity. A POSITA also would have understood that the functionality of host 180 does not require specialized hardware or hardware separate from what would be used to implement broadcaster 120, and that the same would be true for providers 130 and 110. Providers 130 and 110 having similar functionality (*i.e.*, providing commercial and non-commercial content, respectively) further confirms one is readily integrable into the other. Integrating such entities would have been within the skill and knowledge of a POSITA, would have led to predictable results, would have created a reasonable

⁴⁶ n.11.

expectation of success, would have been compatible with Ray, and would have been a mere design choice. EX1002, ¶140.

Motivation to do so arises from Ray’s disclosure of combining servers into a “single architecture,” described above, which would have led a POSITA to do so where logical, including the integrations described above. More motivation arises from Nolan’s disclosure of integrating its Facilitator 101 into its Provider 102, described above, which would have led a POSITA to integrate the comparable entities in Ray (host 180 and broadcaster 120, respectively), and also to integrate Ray’s providers 130 and 110 given their complementary functionality. Additional motivation arises from Ray’s disclosure of these entities having related functionality. For example, Ray discloses that host 180 can “perform redemption of incentive credits,” and that broadcaster 120 distributes the content selected by the consumer. EX1004, ¶28;⁴⁷ §IV(C)(3) (limitation 1.b.i). Provider 130 and 110 both provider content to broadcaster 120. EX1004, ¶25.⁴⁸ A POSITA would have been motivated to combine related entities with such related functionality. Further motivation arises from a desire to reduce the number of distinct servers in Ray’s system for purposes of simplicity, maintenance, etc. EX1002, ¶141.

⁴⁷ n.10; n.12.

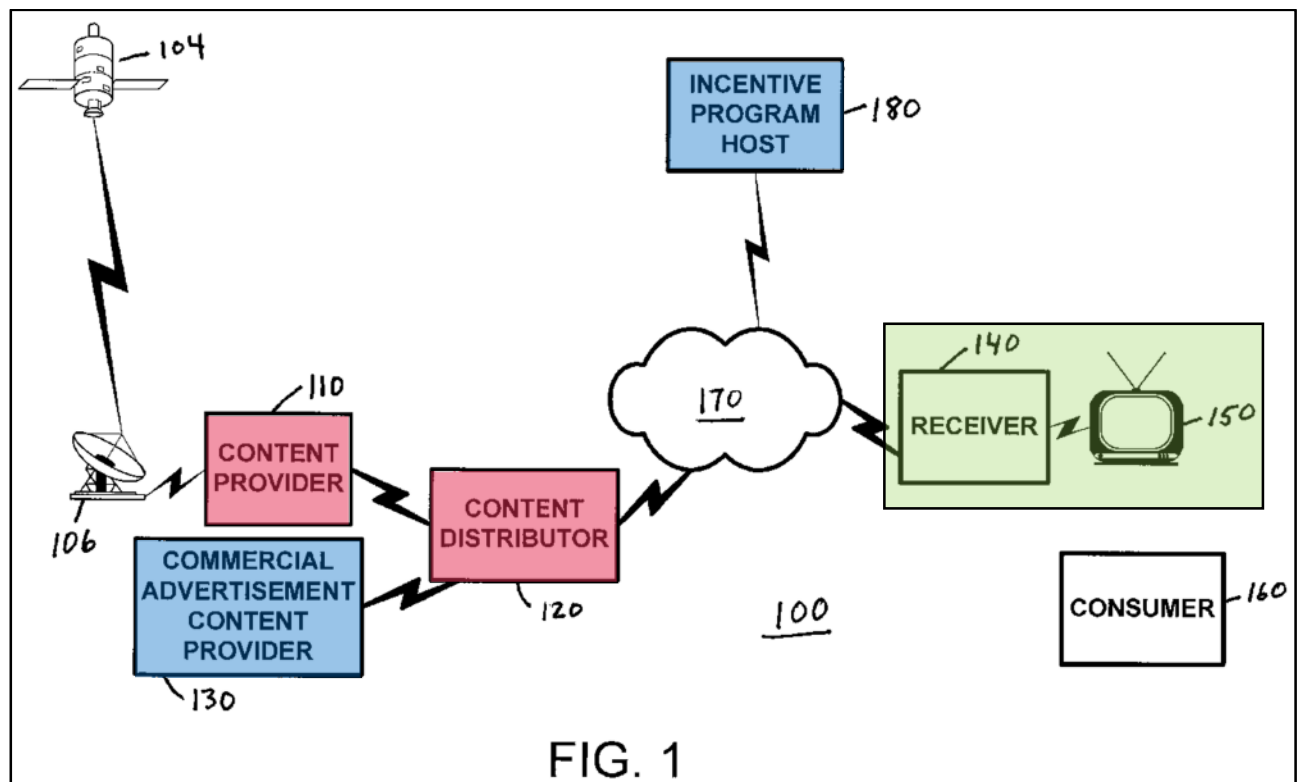
⁴⁸ n.4; n.9.

F. Claim 10

Ray combined with Nolan renders claim 10 obvious. EX1002, ¶¶142-186.

1. [10.pre]

Ray discloses this preamble. Ray discloses “incentive program host” 180 and “commercial advertisement content provider” 130 (also called “advertiser” 130) (collectively, an *advertising image data delivery system*, annotated blue below). §IV(C)(1) (preamble 1.pre).



EX1004, Fig. 1, ¶¶25-29.⁴⁹ EX1002, ¶¶144-145.

Ray also discloses “commercial advertisement content provider” 130 (also

⁴⁹ nn.1, 3-4, 6-10.

called “advertiser” 130) (*an advertiser*). §III(D)(4) (the *advertiser* may be part of the *advertising image data delivery system*). EX1002, ¶146.

Ray further discloses consumers’ receivers 140, televisions 150, and “incentive program account[s]” (collectively, *a plurality of moving image viewing apparatuses*). §IV(C)(1) (preamble 1.pre). EX1002, ¶147.

Ray also discloses “content provider” 110 and “content distributor” 120 (also called “broadcaster” 120) (collectively, *a moving image data delivery system*). §IV(C)(1) (preamble 1.pre). EX1002, ¶148.

Ray discloses that the *advertising image data delivery system* is *capable of being in communication with the moving image data delivery system* because advertiser 130 communicates directly with broadcaster 120. EX1004, Fig. 1, ¶25.⁵⁰ Likewise, Ray’s *advertising image data delivery system* is *capable of being in communication with the plurality of moving image viewing apparatuses* via network 170. EX1004, Fig. 1, ¶28 (host 180 can be “coupled with...consumer receiver 140”).⁵¹ Similarly, Ray’s *advertising image data delivery system* is *capable of being in communication with the advertiser* because host 180 is capable of communicating with advertiser 130 via network 170. EX1004, Fig. 1, ¶28 (host

⁵⁰ n.4.

⁵¹ EX1005, 5 (“Reverse channel” has “communication between viewing device” and “host”), 7 (reverse channel), 9 (step 7, feedback to host).

180 can be “coupled with...advertiser 130”).⁵² EX1002, ¶149.

Ray discloses “commercials” (a *commercial message*). §IV(C)(4) (limitation 1.b.ii). Ray also discloses that “advertisers...pay advertising rates” (the *advertiser paying for the commercial message*). EX1004, ¶5, ¶24 (“program content...is underwritten by television advertising”), ¶40 (“broadcaster...charge[s] advertisers for...commercials” and “broadcaster could charge an advertising company,” meaning advertiser 130 *pay[s] for the commercial message*).⁵³ EX1002, ¶150.

2. [10.a]

Ray discloses this limitation. EX1002, ¶¶151-153.

Ray discloses multiple commercials viewed by consumers on their televisions 150 using receivers 140 (*a plurality of advertising image data of commercial messages to be viewed by the moving image viewing apparatuses*). EX1004, ¶25 (“commercials are intermittently inserted” in a broadcast), ¶29 (“consumer actually does watch the recorded commercials”; “every commercial that is viewed”; “30 minutes of commercials”), ¶34 (“how many commercials a consumer played”), ¶38 (“pet food and soup commercials”).⁵⁴ EX1002, ¶152.

Ray discloses that broadcaster 120 can “obtain commercial content from an

⁵² EX1005, 7 (host communicates with advertiser), 8 (step 2b).

⁵³ n.30.

⁵⁴ EX1005, 1 (“commercials they wish to view”), 15 (“watching commercials”), 16 (“Person watches” a “fixed number” of “commercials”).

advertiser 130.” EX1004, ¶25.⁵⁵ A POSITA would have understood from Ray’s disclosure that the advertiser 130 therefore stores the commercials at least temporarily (*a storage of a plurality of advertising image data of commercial messages ...*). A POSITA also would have understood that advertiser 130 necessarily (inherently) stores such commercials at least temporarily in order to provide them to broadcaster 120. EX1002, ¶153.

3. [10.b.i]

Ray discloses and renders obvious this limitation. EX1002, ¶¶154-158.

Ray discloses “credits”/“points” (*electric data*). §IV(C)(3) (limitation 1.b.i). The credits/points are redeemed for premium television program content, such as a “season finale” (*denoting a right of viewing a television program*). §IV(C)(3) (limitation 1.b.i). EX1002, ¶155.

Host 180 *issue[s]* the credits/points to a consumer’s “incentive program account” (part of *one of the moving image viewing apparatuses*) in exchange for the consumer viewing commercials (*commercial message view by the moving image viewing apparatus*). §IV(C)(4) (limitation 1.b.ii). Host 180 *issues* the credits/points *without* content provider 110 or broadcaster 120 (the *moving image data delivery system*) acting as an *intermediary*. §IV(C)(4) (limitation 1.b.ii). EX1002, ¶156.

⁵⁵ n.4.

The software and/or hardware of the host 180 that *issues* the credits/points (*electric data*) is the *first controller* of this limitation. §III(D)(2) (“controller” construction). Ray discloses that host 180 has software and hardware, such as “processor 201” and “programs” 293 of Figure 2, which is an example implementation of host 180. EX1004, ¶30.⁵⁶ A POSITA also would have understood that host 180 necessarily (inherently) includes software and/or hardware (the *first controller*) to implement the Ray’s disclosed functionality. EX1002, ¶157.

The *commercial message[s]* are *provided by* advertiser 130 (part of *the advertising image data delivery system*). §IV(C)(4) (limitation 1.b.ii); §IV(G)(2) (limitation 10.a). It also would have been obvious to a POSITA to have host 180 (part of *the advertising image data delivery system*) provide the commercials. §IV(C)(4) (limitation 1.b.ii). EX1002, ¶158.

4. [10.b.ii]

Ray discloses and renders obvious this limitation. EX1002, ¶¶159-164.

Ray discloses that a consumer’s receiver 140 and television 150 (collectively, *one of the moving image viewing apparatuses*) are *provided with* premium content (*the television program*) *in exchange of a presentation of* credits/points (*the electric data*). §IV(C)(3) (limitation 1.b.i); §III(D)(1)

⁵⁶ n.11.

(“presentation” construction). EX1002, ¶160.

Ray combined with Nolan also discloses that content provider 110 and the broadcaster 120 (collectively, *the moving image data delivery system*) provide such content to the consumers. §IV(C)(2) (limitation 1.a). EX1002, ¶161.

Ray also discloses and renders obvious that the credits/points (*electric data*) are presented to broadcaster 120 (part of *the moving image data delivery system*), and it would have been obvious to a POSITA to do so. §IV(C)(6)(a) (limitation 1.c). EX1002, ¶162.

Ray further discloses that a consumer redeems credits/points (*electric data*), for example, when “watching a movie” or “watching a sporting event,” which a POSITA would have understood means the consumer uses his or her receiver 140 and/or television 150 to do so (*from the one of the moving image viewing apparatus*). EX1004, ¶47.⁵⁷ Ray also discloses no other device or component that a consumer could use to redeem credits/points (*electric data*), confirming this understanding.⁵⁸ EX1004, Fig. 1, ¶¶25-26.⁵⁹ EX1002, ¶163.

It also would have been obvious to a POSITA to have a consumer redeem

⁵⁷ n.12; EX1005, 13 (viewing device gives access to the “Points Program”), 7 (viewer interacts with viewing device), 5 (“Viewing device[s]”).

⁵⁸ Ray’s personal video recorder (“PVR”) is an example of receiver 140. EX1004, ¶34 (“the content receiver, e.g., the PVR”).

⁵⁹ n.57.

the credits/points (*electric data*) by *present[ing]* them *from the* consumer's receiver 140 and/or television 150 (*one of the moving image viewing apparatus*). A POSITA could have done so by, for example, having the consumer use his or her receiver 140 and television 150 to select premium content in exchange for his or her earned credits/points. Motivation to do so arises from Ray's disclosure of receiver 140 and television 150 as the only devices used by the consumer, which would lead a POSITA to implement the disclosed exchange using such devices. EX1004, Fig. 1, ¶¶25-26.⁶⁰ Motivation also arises from common sense because the consumer would watch such content using receiver 140 and television 150, making those the natural choice of devices from which to present the credits/points. EX1002, ¶164.

5. [10.c.i]

Ray discloses parts of this limitation and renders this limitation obvious. EX1002, ¶¶165-173.

Ray discloses that “a report can be made to an advertiser that a consumer (or a group of consumers) watched an advertisement” (*a report...to the advertiser*). EX1004, ¶43, Fig. 7 (block 728).⁶¹ Also, “[r]eports may be generated from the

⁶⁰ n.57.

⁶¹ EX1005, 1 (“reports are generated concerning advertisement effectiveness”), 3 (“Reporting...advertisers can review results of their advertising campaigns, including” views and feedback).

consumers' feedback" and provided to advertiser 130 (*a report...to the advertiser*).

EX1004, ¶46 ("Thus, advertisers may periodically review...how many people viewed their advertisement [and the] feedback," which a POSITA would have understood implicitly discloses and necessarily requires *report[ing]* that information to the advertiser.).⁶² EX1002, ¶166.

A POSITA would have understood that Ray combined with Nolan discloses such reports coming from the host 180 (part of *the advertising image data delivery system*) because Ray discloses that the data in the reports (*e.g.*, number of viewers and consumer feedback) is first sent from the consumer to the host 180. EX1004, ¶29 ("the number of commercials played, for example, can then be reported back by the consumer's receiver 140 to the incentive program host 180"), ¶34 (the consumer can "transmit a message to the incentive program host...indicat[ing]...how many commercials a consumer played"), ¶45 (the feedback system "requires a transmission medium that can convey transmissions from the consumer to the incentive program," *i.e.*, incentive program host 180).⁶³ EX1002, ¶167.

⁶² n.61.

⁶³ EX1005, 9 (step 7 includes feedback to host and "positive response" to view advertising is sent to host), 6 (host is "clearinghouse for...processing...loyalty points"), 7 (reverse channel), 21 ("Information gather on which commercials were shown in full").

It also would have been obvious to a POSITA to have host 180 (part of *the advertising image data delivery system*) provide to advertiser 130 (*the advertiser*) the disclosed *reports* with feedback and commercial viewing metrics. A POSITA could have done so by having host 180 generate the disclosed *reports* identified above using the data of those reports, which Ray discloses the host has, and transmit them to the advertiser 130, which Ray also discloses, as described above. Motivation to do so comes from Ray's disclosures, described above, that there are such reports, that the host 180 has the information in the reports, and that such information is sent to the advertiser. Additional motivation comes from Ray's disclosure of the host 180 sending reports to the advertisers. EX1004, ¶40 ("demographic data can be reported to various advertisers," which demographic data is first obtained by the "incentive program" host).⁶⁴ EX1002, ¶168.

Ray discloses that "advertisers only pay for the airtime based on the actual number of viewers that watched the commercial" (*payment from the advertiser*). EX1005, 2; EX1004, ¶5 ("advertisers...pay advertising rates" to broadcasters).⁶⁵ It would have been obvious to a POSITA to have advertiser 130 (*the advertiser*) make this payment "based on the actual number of viewers that watched the

⁶⁴ EX1005, 3 (viewer provides "demographic data about themselves"), 10 (registration with "Demographic Information"), 20 ("demographic info").

⁶⁵ n.30.

commercial” *in exchange for* the report described above (and disclosed by Ray) that indicates a consumer watched a commercial. Motivation to do so arises from the fact that the disclosed payment “based on the actual number of viewers that watched the commercial” requires knowing “the actual number,” which is provided in the viewer metrics report described above. EX1002, ¶169.

It also would be obvious to a POSITA to have advertiser 130 make an electronic payment (*electric payment*) to host 180 *in exchange* for the viewing metrics report described above. Motivation to do so arises from Ray’s disclosure that the “report...to an advertiser that a consumer (or a group of consumers) watched an advertisement...can be valuable information to...advertisers.” EX1004, ¶43.⁶⁶ This would motivate a POSITA to pay for the “valuable information.” A POSITA also would have understood that the feedback report disclosed by Ray and described above also would be valuable to the advertiser and therefore naturally result in payment to the host 180 in exchange. EX1002, ¶170.

It also would have been obvious to a POSITA to make any payment from advertiser 130 be an electronic payment (*electric payment*). §IV(C)(6)(b) (limitation 1.c) (obviousness of making an *electric payment*). EX1002, ¶171.

Host 180 necessarily (inherently) would have hardware and/or software (*a*

⁶⁶ n.61.

controller) adapted to receive such electric payment for the reasons set forth for limitation 1.c. §IV(C)(6)(b). It also would have been obvious to implement such a controller for the reasons set forth for limitation 1.c. *Id.* More motivation to do so arises from Ray’s disclosure of advertiser payments, which would have motivated a POSITA to implement such receipt of payments in any entity that may receive such payments. EX1004, ¶5 (“advertisers...pay”); EX1005, 2 (“advertisers...pay”). EX1002, ¶172.

Such a *controller* would be a *second controller* because its functionality would differ from the functionality of the *first controller* (issuing credits/points). §IV(G)(3) (limitation 10.b.i). For example, even if issuing credits/points occurs in the same hardware as receiving the *electric payment*, the software (or firmware) that does so necessarily (inherently) would be different given the differences in functionality, resulting in distinct *controllers*. §III(D)(2) (“controller” construction). It also would have been obvious to a POSITA to implement this limitation’s *controller* separately from the *first controller*, even if only in software, making it a *second controller*, for the reasons set forth for limitation 1.c. §IV(C)(6)(b). EX1002, ¶173.

6. [10.c.ii]

This limitation recites printed matter that is recited “for what it communicates” and is not “functionally or structurally related to [any] associated

physical substrate” of the report. *In re Distefano*, 808 F.3d at 850-51. This claim language therefore is not entitled to patentable weight. *Id.* EX1002, ¶¶174-175.

Nonetheless, Ray discloses this limitation and renders it obvious. EX1002, ¶¶176-177.

Ray discloses a report on consumer viewing metrics and a report on consumer feedback, as described in the previous section. Each report implicitly discloses that host 180 (part of *the advertising image data delivery system*) has issued credits/points (*electric data*) to the consumers’ incentive program accounts (part of *the moving image viewing apparatuses*). Specifically, Ray discloses the host 180 providing “additional incentive program credit” to a consumer for providing feedback. EX1004, ¶45.⁶⁷ And Ray discloses that host 180 provides incentive program credits based on viewing metrics. EX1004, ¶29 (“host can then credit the consumers incentive program account with a corresponding value” corresponding to “[t]he length of time spent viewing the commercials or the number of commercials played”; “a point for every commercial that is viewed”).⁶⁸ In Ray, therefore, the existence of such feedback and viewing metrics in the reports means the host 180 issues credits/points (*electric data*) to the consumers’ accounts.

⁶⁷ EX1005, 1 (“feedback mechanism”), 12 (viewer “is provided...points” “[w]hen questionnaire is complete”), 21 (step 9, points for feedback).

⁶⁸ EX1005, 20 (“points per second” of commercial viewing), 21 (determine “viewer points” based on “which commercials were shown in full”).

The reports at least implicitly *indicate* such *issu[ance]* of the *electric data*.

EX1002, ¶177.

7. [10.c.iii]

Ray discloses and renders obvious this limitation. §IV(C)(5) (limitation 1.b.iii), incorporated here by reference. EX1002, ¶¶178-179.

8. [10.d]

Ray combined with Nolan renders this limitation obvious. EX1002, ¶¶180-186.

The claim language “the report indicating ...” has no patentable weight. §IV(C)(6)(a) (limitation 1.c). EX1002, ¶¶181-182.

Ray combined with Nolan discloses and renders obvious broadcaster 120 (part of *the moving image data delivery system*) *present[ing] a report* to host 180 (part of *the advertising image data delivery system*) *indicating that* broadcaster 102 *is presented with* credits/points (*electric data*). §IV(C)(6)(a) (limitation 1.c). EX1002, ¶183.

The “received electric payment” of this limitation refers to the *electric payment* of limitation 10.c.i, which Ray renders obvious as an electronic payment received by host 180 (and its *second controller*) from advertiser 130. §IV(F)(5) (limitation 10.c.i). EX1002, ¶184.

As described for limitation 1.c, it would have been obvious to a POSITA for

Ray's host 180 to provide an electronic payment to broadcaster 120 (part of *the moving image data delivery system*) in exchange for presentation of the report described for limitation 1.c and referenced above. §IV(C)(6)(b) (limitation 1.c). For the same reasons, it would have been obvious to a POSITA for Ray's host 180 to make this payment to broadcaster 120 by *allotting the received electric payment* to broadcaster 120. A POSITA could have done so by, for example, having host 180 simply use some or all of the funds it received as part of the *electric payment* of limitation 10.c.i to make the payment to broadcaster 120. A POSITA could have done so using Nolan's disclosures that "[t]he Advertiser compensates the Facilitator" and "[the] Facilitator distributes (*allots*) the funds to itself and the Providers." EX1006, ¶107. Nolan's Facilitator is akin to Ray's host 180 and Nolan's Providers are akin to Ray's broadcaster 120. §IV(C)(6)(b) (limitation 1.c). A POSITA could have incorporated this functionality into the comparable entities in Ray. Motivation to do so arises from Nolan's disclosure of allotting funds in this manner. More motivation arises from a POSITA's understanding that any payment by host 180 would come from funds it has received, which include the funds received as part of the received electric payment of limitation 10.c.i. EX1002, ¶185.

A POSITA would have understood that the *electric payment* from host 180 necessarily (inherently) would involve payment by software and/or hardware (a

controller) because such payment would be handled electronically rather than physically. §III(D)(2) (“controller” construction). Such a *controller* would be a *third controller* because its functionality would differ from *first* and *second controller[s]*. §IV(F)(5) (limitation 10.c.i) (establishing the distinctness of the *second controller*). It also would have been obvious to a POSITA to implement this *controller* separately from the *first* and *second controller[s]*, making it a *third controller*, because its functionality of *allot[ing] payment* differs from the functionality of the other *controllers* (issuing credits/points, receiving payment). §IV(F)(5) (limitation 10.c.i) (obviousness of separate controllers). The motivation to implement separate controllers set forth for limitation 10.c.i applies equally here. Further motivation arises from allotting payment and receiving payment being opposite functions, which would motivate a POSITA to implement their functionality separately, even if only in separate software modules. EX1002, ¶186.

G. Claim 11.

Ray combined with Nolan renders claim 12 obvious. §IV(C) (claim 10). Ray discloses that broadcaster 120 transmits content, including commercial content (*the plurality of advertising image data of commercial messages*), to a consumer via “on-demand video streaming...over...the [I]nternet.” EX1004, ¶49, ¶25 (inserting commercial content into program content).⁶⁹ A POSITA would have understood

⁶⁹ n.18.

that “on-demand” content is “on-demand” because the broadcaster *automatic[ally]* transmits such commercial content to the consumer’s device as part of a stream. For example, the broadcaster performs no manual operation to begin streaming particular commercial content to a particular consumer. Such streaming *electrically provides* the commercial to the consumer’s receiver 140 and television 150 (each *one of the plurality of moving image viewing apparatuses*). EX1004, Fig. 1, ¶26.⁷⁰ EX1002, ¶¶187-193.

Ray also discloses that broadcaster 120 can *electrically provide* commercial content via “cable and satellite television feeds,” which also are *automatic* transmissions for the same reason. §IV(C)(2) (limitation 1.a). For example, when a consumer turns on his or her television, the broadcaster performs no manual operation to broadcast the content to that consumer. EX1002, ¶190.

The hardware and/or software of broadcaster 120 that delivers the commercial to the consumer’s viewing device is a *controller*. §III(D)(2) (“controller” construction). A POSITA would have understood that broadcaster 120 necessarily (inherently) includes such hardware and/or software in order to perform the disclosed broadcasting. EX1002, ¶191.

That *controller* is a *fourth controller* because such hardware and/or software

⁷⁰ EX1005, 5 (describing “Forward Channel” to “viewing device”), 7 (showing same); n.10.

would be unrelated to the functionality of the other three controllers recited by claim 10, and therefore distinct from them at least at a software level. It also would have been obvious to a POSITA to implement such *controller* separately from the other controllers of claim 10, making it a *fourth controller*. Doing so would have been a mere design choice, and a POSITA would have been motivated to do so because this controller's functionality is unrelated to the other controllers recited by claim 10. §IV(F)(5) (limitation 10.c.i) (obviousness of implementing a discrete controller). EX1002, ¶192.

If Patent Owner contends that the preamble of claim 10 is limiting, then Petitioner identifies, for purposes of claims 11-14, broadcaster 120 as being part of the *advertising image data delivery system* while also still being part of the *moving image data delivery system*. This makes sense because broadcaster 120 delivers commercials (*advertising image data*) to consumers. And there is nothing in the claim language or specification that would prohibit one component in Ray from being part of each these two recited systems. EX1002, ¶193.

H. Claim 12.

Ray combined with Nolan renders claim 12 obvious. §IV(F) (claim 10). Ray discloses *a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses*. §IV(G) (claim 11). EX1002, ¶¶194-197.

Ray also discloses doing so in response to a consumer request (*by request thereof*). EX1005, 3 (“customer indicates their desire to view a given commercial”), 11 (“Viewer elects to view advertisement”), 17 (“Thumbs Up” button), 19 (“Viewer selects Thumbs Up button” to view commercial). EX1002, ¶197.

I. Claim 13.

Ray combined with Nolan renders claim 13 obvious. §IV(F) (claim 10). Ray discloses *a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses*. §IV(G) (claim 11). EX1002, ¶¶198-204.

Ray also discloses that “[t]he broadcaster combines the non-commercial program content with the commercial content such that the commercials are intermittently inserted within the non-commercial program content.” EX1004, ¶25 (for example, “insert commercials during stoppage of play”).⁷¹ Each commercial is *related to the television program* into which it is inserted because it is then associated with that television program to create “combined content.” EX1004, ¶26; EX1004, ¶42 (creating content with “designated commercial breaks” and “available spots” for commercial content, which also creates a relationship with the

⁷¹ EX1005, 15 (“Person is watching show;” “Person watches commercial”), 18 (viewer “reaches a commercial block in a program”).

inserted commercials).⁷² Ray’s “non-commercial program content” includes *television program[s]* such as “a sporting event.” EX1004, ¶25; EX1004, ¶49 (“television broadcast,” “television feeds”).⁷³ EX1002, ¶201.

Ray also renders this limitation obvious because commercials about television programs were well known and it would have been obvious to broadcast such commercials for the reasons set forth in Ground 2, incorporated here by reference. It also would have been obvious to a POSITA to broadcast such a commercial (*e.g.*, for the next episode of a program) while an episode of the television program is being viewed (*a television program designated by the moving image viewing apparatus*, as established below). Motivation to do so arises out a desire to inform the viewing audience of the next episode, which a POSITA would have understood, and out of a desire to target the advertisement towards the most relevant audience, which Ray discloses. EX1004, ¶42 (“target demographic”); EX1005, 2 (“targeted audience”), 17 (“targeted commercials”). EX1002, ¶202.

The television program, when viewed by the consumer, is *designated by* the consumer’s receiver 140 and/or television 150 (each a *moving image viewing apparatus*) because each of receiver 140 and television 150 necessarily

⁷² EX1005, 18 (“PVR builds a commercial block”), 20 (“commercial spots;” “content with designated commercial breaks”), 21 (“available spots”).

⁷³ nn.9-10, 12.

(inherently) tunes to that program, or otherwise designates that program as the program to be displayed, in order to display it to the consumer. EX1004, ¶26 (“consumer can view the content on display 150”), Fig. 1, ¶49 (“cable and satellite television feeds,” which require tuning by a viewing device).⁷⁴ EX1002, ¶203.

J. Claim 14.

Ray combined with Nolan renders claim 14 obvious. §IV(C) (claim 10). Ray discloses *a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses*. §IV(G) (claim 11). EX1002, ¶¶205-210.

Ray also discloses that its commercials may include a commercial (*an advertisement*) “inserted” or “combined” with a *television program*. §IV(I) (claim 13). Such an *advertisement* is *of the television program* at least because it is part of the television program. EX1002, ¶208.

If the Board finds that this claim requires that the *advertisement* be about a *television program*, Ray renders this limitation obvious because commercials about television programs were well known to a POSITA and it would have been obvious to broadcast such commercials for the reasons set forth in Ground 2, incorporated here by reference. EX1002, ¶209.

⁷⁴ n.9; EX1005, 17 (showing display), 15 (“Person is watching show”).

K. Claim 15.

Ray combined with Nolan renders claim 15 obvious. §IV(F) (claim 10). Ray discloses that each element of its system may be implemented as the computer of Figure 2. EX1004, ¶30.⁷⁵ Computer 200 has “extensive flexibility and configurability”; for example, “a single architecture might be utilized to implement one or more servers.” EX1004, ¶31.⁷⁶ Each of host 180 and advertiser 130 are a server (or each are implemented as a server) for the reasons set forth for claim 9. §IV(F) (claim 9). Ray therefore discloses that host 180 (part of the *advertising image data delivery system*) can be *integrated into* advertiser 130 or its server (*a system of the advertiser*) as a “single architecture.” EX1002, ¶¶211-214.

It also would have been obvious to a POSITA to integrate host 180 into advertiser 130 or its server for the reason set forth for claim 9, incorporated here by reference. More motivation to do so arises from Ray’s disclosures that the advertiser seeks to have its commercials viewed and that the host 180 manages a program that incentivizes consumers to watch commercials. EX1004, ¶7, ¶29.⁷⁷ Thus, a POSITA would have understood that the advertiser has an interest in

⁷⁵ n.11.

⁷⁶ n.11.

⁷⁷ EX1005, 1 (“Advertisers are losing access ...”), 3 (“advertisers can review results...on the effectiveness of their advertising campaign”), 6 (host is “clearinghouse” for the points program), 3 (“Incentive”).

establishing such an incentive program, which would have led a POSITA to integrate host 180 into advertiser 130 or its server. EX1002, ¶214.

* * *

If Patent Owner argues the portions of Ray or Nolan cited above relate to different, incompatible embodiments (which they do not), it would have been obvious to a POSITA to combine such embodiments into a single system at least because such embodiments are described in the same prior art reference, are fully compatible with each other, and could have been combined with minimal effort to achieve predictable results. EX1002, ¶¶215-216.

V. GROUND 2: CLAIMS 13 AND 14 ARE OBVIOUS IN VIEW OF RAY, NOLAN, AND CANSLER

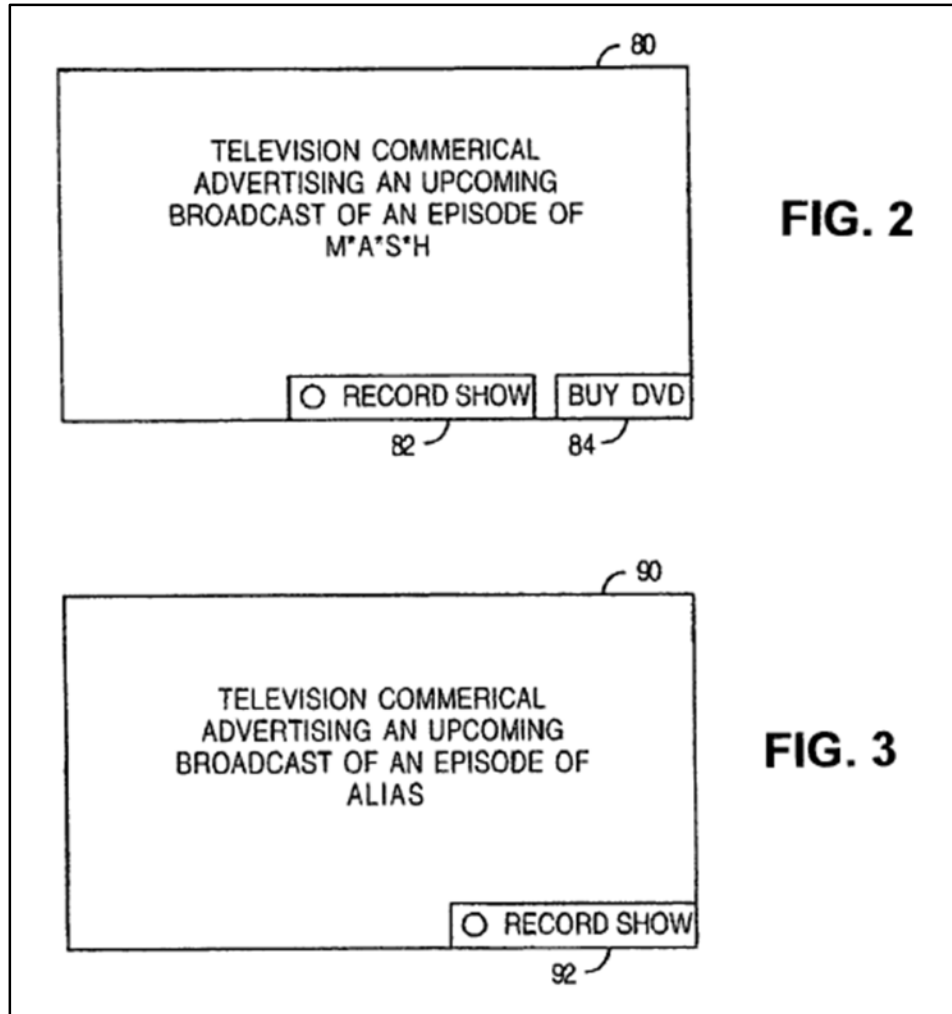
A. Overview of Ray and Nolan

§IV(A) (overview of Ray), §IV(B) (overview of Nolan). EX1002, ¶¶217-218.

B. Overview of Cansler

U.S. Patent No. 8,561,113 (“Cansler”) was filed on Aug. 12, 2005 and is prior art to the ’391 patent under 35 U.S.C. §102(e) (pre-AIA). EX1008, cover page. EX1002, ¶219.

Cansler discloses television commercials that advertise television programs such as *M*A*S*H* and *Alias*:



EX1008, Figs. 2-3, 5:23-25 (“a television commercial 80 that advertises an upcoming broadcast of an old episode of the ‘M*A*S*H’ television program”), 5:32-34 (“a television commercial 90 that advertises an upcoming broadcast of a new episode of the ‘Alias’ television program.”). EX1002, ¶220.

Cansler is analogous art to the ’391 patent and was not cited during prosecution of the ’391 patent. EX1001, 1-2; EX1003. EX1002, ¶¶221-222.

C. Claim 13

Ray combined with Nolan and Cansler renders claim 13 obvious. Ray

combined with Nolan renders claim 13 obvious. §IV(I) (ground 1, claim 13). It would have been obvious to a POSITA to make one of Ray's disclosed television commercials, in view of Cansler, a commercial about a television program (*being related to a television program designated by the moving image viewing apparatus*), as established below for claim 14, incorporated here by reference.

EX1002, ¶¶223-225.

D. Claim 14

Ray combined with Nolan and Cansler renders claim 14 obvious. Ray combined with Nolan renders claim 14 obvious. §IV(J) (ground 1, claim 14). Cansler discloses television commercials for television programs such as *M*A*S*H* and *Alias* (*an advertisement of a television program*), as described above. §V(B) (overview of Cansler). Such commercials were in the knowledge of a POSITA, as confirmed by Cansler. §V(B). It would have been obvious to a POSITA to make one of Ray's disclosed television commercials into a commercial about a television program. A POSITA could have done so simply by selecting such a commercial (*e.g.*, one of the Cansler commercials described above) for Ray's disclosed inclusion of such commercials in non-commercial content. §IV(J) (ground 1, claim 14). Motivation to do so arises from a desire to broadcast commercials desired by certain content providers and/or broadcasters, such as the providers and/or broadcasters of *M*A*S*H* and *Alias*, in order to generate ad

revenue (or other compensation) from such entities. Such motivation would have been within a POSITA's knowledge and also arises from Ray. Ex1004, ¶5 (“advertisers...pay advertising rates”).⁷⁸ EX1002, ¶¶226-230.

VI. DISCRETIONARY DENIAL IS NOT WARRANTED

A. 35 U.S.C. §314(a) Analysis

The *Fintiv* factors (enumerated below) weigh against discretionary denial. IPR2020-00019, Paper 11, 5-6 (PTAB Mar. 20, 2020) (precedential). The “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” dated June 21, 2022 (“Interim Guidance”) and recent board decisions applying these factors confirm discretionary denial is not warranted here.

1. Stay

Neither party has requested a stay in the Litigation. At worst, this factor is neutral because the Board “will not attempt to predict” how the district court will proceed if a stay has not been requested by either party. *Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 7 (Jun. 16, 2020) (informative).

2. Trial Date

“[W]hen considering the proximity of the district court’s trial date to the

⁷⁸ n.30.

date when the PTAB final written decision will be due, the PTAB will consider the median time from filing to disposition of the civil trial for the district in which the parallel litigation resides.” Interim Guidance, 3. Here, the anticipated trial date, as computed in accordance with the Interim Guidance, is around September 22, 2026, 32.2 months from January 11, 2024. EX1011, 14. Additionally, the trial date in the scheduling order is June 22-26, 2026. EX1012. The deadline for a Final Written Decision will be around July 2026. Thus, this factor weighs against a discretionary denial based on the computed anticipated trial date.

3. Parallel Proceeding

In *Sand Revolution II*, the parties had already “exchanged infringement and invalidity contentions, and the district court [had] conducted a *Markman* hearing and entered a related Order.” *Sand Revolution II* at 10. Despite these facts, the Board found that the third *Fintiv* factor “weighs only marginally, if at all, in favor of exercising discretion to deny institution.” *Id.* If the Litigation proceeds as scheduled, it will be at a similar stage. The *Markman* hearing is scheduled for September 16, 2025. EX1012. Accordingly, this factor weighs only marginally, if at all, in favor of a discretionary denial.

4. Issue Overlap

The final written decision is anticipated to be released slightly before or around the same time as the currently scheduled trial date. §VI(A)(2). The final

written decision is anticipated to precede the earliest expected trial date, as calculated in accordance with the Interim Guidance, by around three months and the as-scheduled trial date by 9 days. *Id.* The issuance of a final written decision before trial will ensure that issues decided during *inter partes* review will be different from the issues decided by the district court due to estoppel. The district court case involves a subset of the claims challenged in the petition. EX1010 (not asserting claims 2 and 11). Thus, this factor weighs in favor of institution.

5. Same Party

Because Petitioners and the Patent Owner are the parties in the Litigation, and because this Board is likely to reach the merits around the same time as the district court, this factor weighs slightly against discretionary denial. *See NVIDIA Corp. v. Invensas Corp.*, IPR2020-00603, Paper 11, at 23 (PTAB Sept. 3, 2020) (this factor weighs against discretionary denial where district court trial and IPR final written decision are expected “around the same time”). However, members of the Board have noted that *Fintiv* addresses only the scenario in which the petitioner is unrelated to a defendant in a parallel proceeding, finding this should weigh against denying institution, but that *Fintiv* “says nothing about situations in which the petitioner is the same as, or is related to, the district court defendant.” *Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.*, IPR2020-00122, Paper 15, at 11 (PTAB May 15, 2020) (APJ Crumbley, dissenting) (noting that disfavoring a “defendant in

the district court” is “contrary to the goal of providing district court litigants an alternative venue to resolve questions of patentability”).

6. Other Considerations

Other considerations weigh strongly against a discretionary denial. The challenged claims are clearly invalid, Petitioners have not previously challenged any related patents based on the references relied upon in this petition, and the ’391 patent has never been challenged in a post-issuance proceeding. Were the Board to deny institution, years of district court litigation would be required to obtain a finding of invalidity. Thus, this factor weighs against a discretionary denial.

In sum, four of the *Fintiv* factors weigh against a discretionary denial, one of the *Fintiv* factors weigh only marginally in favor of a discretionary denial, and one is neutral. Thus, institution should be granted.

Even if the Board were to determine that *Fintiv* factors on balance weigh in favor of denial, institution should nonetheless be granted because this petition satisfies the compelling merits standards. Interim Guidance at 4; *Vizio, Inc. v. Maxell, Ltd.*, IPR2022-01458, Paper 8, at 62 (PTAB Apr. 11, 2023).⁷⁹

B. § 325(b) Analysis

Applying the two-part framework discussed in *Advanced Bionics, LLC v.*

⁷⁹ The Board’s *Fintiv* framework should be overturned because it (1) exceeds the Director’s authority, (2) is arbitrary and capricious, (3) and was adopted without notice-and-comment rulemaking.

Med-El Elektromedizinische Gerate GMBH, IPR2019-01469, Paper 6, at 7-9

(PTAB Feb. 13, 2020), the Board should not exercise its §325(d) discretion to deny institution.

None of the challenges are substantially the same as those considered during prosecution. The primary challenges in this petition rely on Ray, Nolan, and Cansler.

If the challenges in this petition are found to be based on prior art that is the same as or cumulative to prior art considered by the examiner, the examiner has made a clear error in allowing the claims over such prior art. The challenges satisfy the compelling merits standard, and allowing the claims over such prior art therefore is clear error.

VII. MANDATORY NOTICES UNDER 37 C.F.R. §§42.8(B)(1)-(4)

A. Real Party-In-Interest

Amazon.com, Inc., Amazon.com Services, Inc., Amazon Web Services, Inc., and Twitch Interactive, Inc. are the real parties-in-interest.

B. Related Matters

The '391 patent is subject to the following actions:

- *NL Giken Inc. v. Amazon.com, Inc.*, No. 1:24-cv-00028 (D. Del.) (the “Delaware Litigation”).

C. Lead and Backup Counsel

Lead Counsel	Backup Counsel
Jennifer Librach Nall Reg. No. 57,053 DLA Piper LLP (US) 303 Colorado St., Suite 3000 Austin, TX 78701 Phone: 512.457.7249 Fax: 512.721.2249 jennifer.nall@dlapiper.com	Robert Buergi Reg. No. 58,125 DLA Piper LLP (US) 845 Texas Ave., Suite 3800 Houston, TX 77002 Phone: 713.425.8440 Fax: 650.687.1144 robert.buergi@dlapiper.com Joseph Wolfe Reg. No. 73,173 DLA Piper LLP (US) 1650 Market St., Suite 5000 Philadelphia, PA 19103 Phone: 215.656.3359 Fax: 215.606.2059 joseph.wolfe@dlapiper.com Michael Saulnier Reg. No. 78,432 DLA Piper LLP (US) 303 Colorado St., Suite 3000 Austin, TX 78701 Phone: 512.457.7065 Fax: 512.721.2234 michael.saulnier@dlapiper.com Jessica Hannah (<i>pro hac vice</i> forthcoming) DLA Piper LLP (US) 555 Mission Street, Suite 2400 San Francisco, CA 94105 Phone: 415.836.2570 Fax 415.659.7370 jessica.hannah@dlapiper.com

D. Service Information

Service information for lead and backup counsel is provided in the designation of lead and backup counsel above. Petitioner consents to electronic service to lead and backup counsel and to:
DLA-Amazon-NLGiken@dlapiper.com.

Respectfully submitted,

/s/ Jennifer Librach Nall

Jennifer Librach Nall

Reg. No. 57,053

DLA Piper LLP (US)

303 Colorado Street, Suite 3000

Austin, TX 78701

Phone: 512.457.7249

Fax: 512.721.2249

jennifer.nall@dlapiper.com

Attorney for Petitioner, Amazon.com, Inc., Amazon.com Services, LLC, Amazon Web Services, Inc., and Twitch Interactive, Inc.

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Petitioner certifies that this petition includes 13,912 words, as measured by Microsoft Word, exclusive of the table of contents, mandatory notices under §42.8, the certificates of service, the certificate of word count, the table of claims, and the table of exhibits.

Date: January 3, 2025

s/ Jennifer Librach Nall

Jennifer Librach Nall

Reg. No. 57,053

DLA Piper LLP (US)

303 Colorado Street, Suite 3000

Austin, TX 78701

Phone: 512.457.7249

Fax: 512.721.2249

jennifer.nall@dlapiper.com

Attorney for Petitioner, Amazon.com, Inc., Amazon.com Services, LLC, Amazon Web Services, Inc., and Twitch Interactive, Inc.

CERTIFICATE OF SERVICE

The undersigned certifies pursuant to 37 C.F.R. §§ 42.6(e) and 42.105 that on January 3, 2025, a true and correct copy of the Petition for *Inter Partes* Review of U.S. Patent No. 8,094,236 was served by emailing a copy of same (by agreement) to the following attorneys for the Patent Owner:

- James Morris (James.Morris@WolfGreenfield.com).
- Hunter Keeton (Hunter.Keeton@WolfGreenfield.com)

A courtesy copy was sent to the Patent Owner's counsel via electronic mail:

WGS-NLGikenv.Amazon@WolfGreenfield.com

Date: January 3, 2025

/s/ Jennifer Librach Nall
Jennifer Librach Nall
Reg. No. 57,053
DLA Piper LLP (US)
303 Colorado Street, Suite 3000
Austin, Texas 78701
Phone: 512.457.7249
Fax: 512.721.2249
jennifer.nall@dlapiper.com
*Attorney for Petitioners Amazon.com,
Inc., Amazon.com Services, Inc.,
Amazon Web Services, Inc., and Twitch
Interactive, Inc.*