IN UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.

Petitioners,

v.

MAXELL, LTD.,
Patent Owner

Case: IPR2024-00777

U.S. Patent No. 11,017,815

PATENT OWNERRESPONSE TO PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 11,017,815

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Patent Trial and Appeal Board
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PATENT OWNER'S EXHIBIT LIST

Description	Exhibit #
1st Amended Docket Control Order from District Court Litigation	2001
Original Docket Control Order from District Court Litigation	2002
Maxell's Supplemental Preliminary Election of Asserted Claims	2003
Defendants' Preliminary Election of Prior Art	2004
IPR2024-00735 & IPR2024-00777 Petitions side-by-side compare	2005
U.S. Patent No. 10,679,647	2006
U.S. Patent No. 10,199,072	2007
U.S. Patent No. 9,818,449	2008
U.S. Patent No. 9,384,783	2009
U.S. Patent No. 8,644,684	2010
U.S. Patent No. 7,613,383	2011
U.S. Patent Application No. 2007/0022382	2012
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U.S. Patent No. 6,480,669	2014
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U.S. Patent No. 7,853,893	2016
Petitioner's invalidity contentions chart in District Court—Kaplan	2017
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Certificate of Accuracy for Translation of JP 4385943B2	2020
Declaration of Jacob Sharony, Ph.D.	2021
Internet Archive Web Page from Hauppauge Computer Works (8/03)	2022
Internet Archive Web Page from Hauppauge Computer Works (9/03)	2023
www.bricklin.com/homenetwork.htm	2024
https://www.itprotoday.com/it-infrastructure/mixing-wired-and-wireless-networking-in-your-home	2025
The Benefits of Wireless Technologies	2026

(https://librarytechnology.org/document/9643)	
Internet Archive Web Page from Hauppauge Computer Works (10/03)	2027
Internet Archive Web Page from Hauppauge Computer Works (10/03)—Product Data Sheets	2028
Internet Archive Web Page from Hauppauge Computer Works (10/03)—Manuals	2029
TS 101 197 v1.2.1 (2002-02)	2030
Scrambling (Conditional Access System)	2031
Conditional Access (10/01)	2032
District Court Claim Construction Order	**2033**
Samsung Claim Construction Brief	**2034**
Lassalle, Broadcast Encryption	**2035**
Bederson Deposition Transcript (June 6, 2024)	**2036**
Bederson Claim Construction Declaration	**2037**
Bederson Deposition Transcript (January 17, 2024)	**2038**
User's Guide for Windows NT	**2039**
Declaration of Ravin Balakrishnan, Ph.D.	**2040**

I. INTRODUCTION

Patent Owner Maxell, Ltd. ("Patent Owner") respectfully requests that the Board confirm the patentability of claims 16-27 ("challenged claims") of U.S. Patent No. 11,017,815 ("the '815 Patent") (EX1001). Petitioner fails to show by a preponderance of the evidence that Claims 16-27 are unpatentable. None of the cited references alone or in combination disclose the arrangement of each element of claims 16-27.

The Board should confirm the patentability of the challenged claims.

II. THE SCOPE OF THE PROCEEDING

A. U.S Patent No. 11,017,815

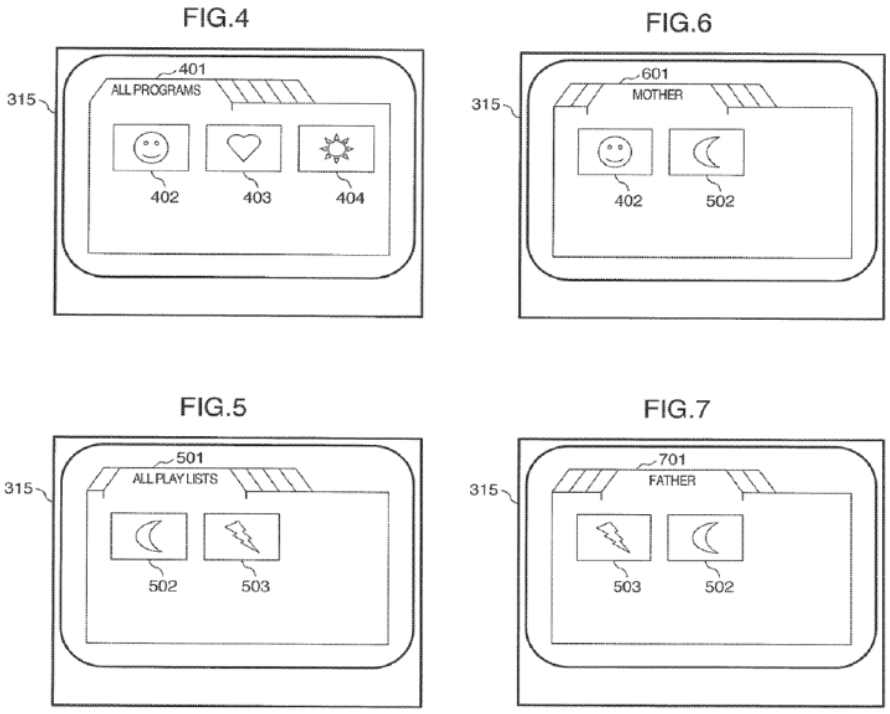
The '815 Patent is entitled "Editing Method and Recording and Reproducing Device," and claims priority to multiple Japanese applications, the earliest of which was filed on December 2, 2004. The '815 Patent issued on May 25, 2021.

The '815 Patent is directed to an information processing apparatus, and related methods, that manages digital data and reproduces video content associated with user profiles in a specific manner that enables improved video management, storage, and the presentation of groups of video information. EX1001, at 2:63-3:6. At the time of the invention, content systems allowed users to group media into "playlists," but those playlists were not optimized for multiple users. *Id.* at 2:28-47. Different members of the same household, for instance, could not customize their views with

select playlists and programs. The ’815 Patent solved this problem by providing a recording and reproducing device in which the user can select and manage arbitrary playlists in a particular manner using hierarchical levels of information management.

More specifically, the claimed inventions are directed to a hierarchical management interface with different areas and classifications associated with different user information, association, and/or behavior. For example, one of the claimed inventions contains a “first area” and a “second area.” The first area includes a “first character” associated with a “first group” of video information for a “first classification” and a “second character” that is associated with a “second group” of video information for a “second classification.” The second area displays a first or second group of thumbnails configured upon user selection of the first and second characters.

Both groups of video information are stored as part of the plurality of stored video information, and the first group of video information is configured to allow a user to edit. Finally, when one video information is deleted from the first group it continues to be included in the second group and a thumbnail corresponding to the video information is displayed as one of the second group of thumbnails. Examples of display output of an information processing apparatus that are capable of implementing the invention of the ’815 Patent are shown below:



Id. at Figs. 4-7. As a result, it becomes possible for the user to select arbitrary playlists or reproduction ranges and conduct management of that data. Even in the case where a plurality of users share a single recording medium, each user can manage his or her favorite reproduction content, resulting in improved usability.

B. ’815 Patent Family Prosecution History

U.S. Application No. 16/883,124 (the “’124 Application”), which issued as the ’815 Patent, was filed on 5/26/2020. The ’124 Application claimed priority to a series of continuation applications that matured into various patents. *See* EXS2006-2011; *see also* EXS1040-1045 (file histories of related patents) All the patents stemming from the Japanese priority applications were examined by the same Primary Examiner.

C. The ’815 Patent’s Priority Date

To support the use of Wong for Grounds 9 and 10, Petitioner contends that none of the applications to which the ’815 Patent claims priority that were filed prior to 11/9/2017 “satisfy the requirements of 35 U.S.C. §112 for at least [Terms 1-3].” Pet. at 9-12. However, each of Terms 1-3 has written support in several applications prior to 11/9/2017. EX2040, ¶64. In fact, each term has support in the priority application JP 2004- JP2004-378767. *See* EX2019 (Translation of JP2004-378767).

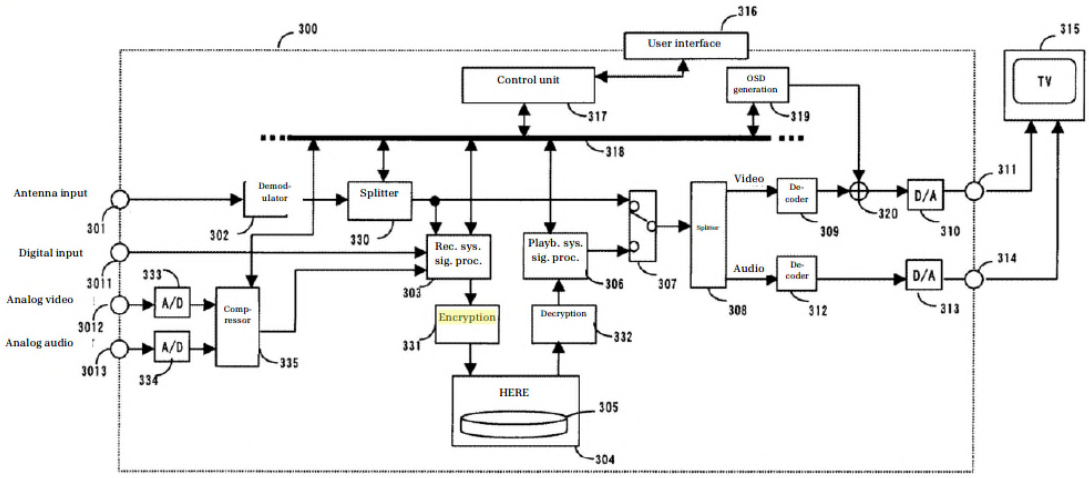
With respect to Term 1, the “encryption” limitation is disclosed in the priority application at least in the following:

> 331 is an encryption circuit for encrypting recorded data, 304 is a recording and playback system including drive functionality for the recording medium, 305 is a recording medium, 332 is a decryption circuit for decrypting data which has been encrypted and recorded on the recording medium, 306 is a playback system signal processing circuit….
>
> During recording, a signal transmitted by digital broadcast, for example, and received is demodulated using a predetermined method in the demodulation circuit 302 and then subjected to any requisite signal processing such as modulation or addition of data for timing adjustment in the recording system signal processing circuit 303 before being encrypted in the encryption circuit 331 and recorded on the recording medium 305 by the recording and playback system 304. The digital signal input by the digital input terminal 3011 is subjected to any

requisite signal processing such as modulation and addition of data for timing adjustment in the recording system signal processing circuit 303 before being encrypted in the encryption circuit 331 and recorded to the recording medium 305 by the recording and playback system 304. The analog video signal input by the analog video input terminal 3012 and the analog audio signal input by the analog audio input terminal 3013 are compressed in the compression circuit 335, pass through the recording system signal processing circuit 303, and are encrypted by the encryption circuit 331 before being recorded on the recording medium 305 by the recording and playback system 304.

During playback, encrypted digital data read via the recording and playback system 304 from the recording medium 305 in response to a user command is decrypted by the decryption circuit 332, subjected to any requisite signal processing for playback such as demodulation in a manner consistent with a predetermined modulation method in the playback system signal processing circuit 103 and sent to the splitter circuit 308 via the switching circuit 307.

FIG. 3



EX2019, ¶¶[0017]-[0019]; Fig. 3; EX2040, ¶65.

Specifically, a POSITA would know about encrypted video information that is wirelessly received by a device and would also know that the circuits (for example, input and decryption) described above could be used to receive the digital broadcast signal (encrypted video information), decrypt it, and produce it for viewing, all satisfy the written description requirement because the essence of the original disclosure conveys the necessary information. For example, a POSITA, at the time of ’815 Patent invention in 2004 would know through the technical documents and specifications that the digital broadcast is generally encrypted, as shown in the documents and figures below:

ETSI TS 101 197 V1.2.1 (2002-02)
Technical Specification

**Digital Video Broadcasting (DVB);
DVB SimulCrypt;
Head-end architecture and synchronization**

8.1 Timing issues

In all systems there is a Crypto Period (CP) when data is scrambled with a particular Control Word (CW).

For STBs to regenerate the CW in time, the ECM play-out shall be correctly synchronized with this CP.

To accommodate different synchronization approaches, the SCS will be responsible for requesting enough CWs and ECM packets in advance of their play-out time.

The timing diagram in figure 3 illustrates this relationship between CW generation, ECM generation, ECM play-out and CP.

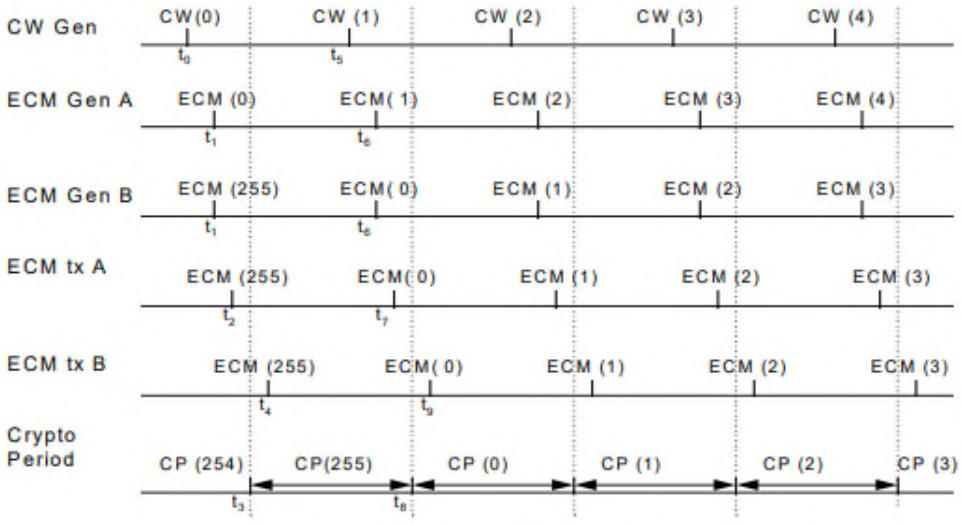
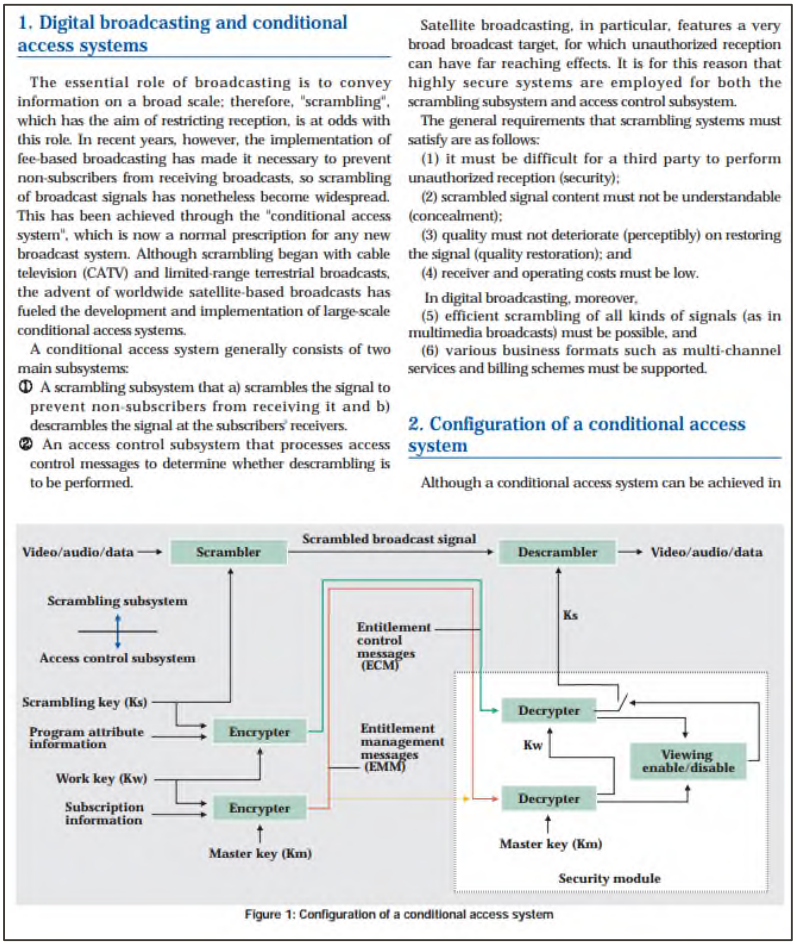


Figure 3: ECM timing diagram

At the beginning of CP(0), at t_8, the scrambler begins using CW(0) to encrypt the signal. Each CA system shall ensure that its STBs obtain this CW in advance of this point.

Ex. 2030, ETSI TS 101 197 V1.2.1 (2002-02) at 32; *see also* EX2040, ¶68.



1. Digital broadcasting and conditional access systems

The essential role of broadcasting is to convey information on a broad scale; therefore, "scrambling", which has the aim of restricting reception, is at odds with this role. In recent years, however, the implementation of fee-based broadcasting has made it necessary to prevent non-subscribers from receiving broadcasts, so scrambling of broadcast signals has nonetheless become widespread. This has been achieved through the "conditional access system", which is now a normal prescription for any new broadcast system. Although scrambling began with cable television (CATV) and limited-range terrestrial broadcasts, the advent of worldwide satellite-based broadcasts has fueled the development and implementation of large-scale conditional access systems.

A conditional access system generally consists of two main subsystems:

❶ A scrambling subsystem that a) scrambles the signal to prevent non-subscribers from receiving it and b) descrambles the signal at the subscribers' receivers.

❷ An access control subsystem that processes access control messages to determine whether descrambling is to be performed.

Satellite broadcasting, in particular, features a very broad broadcast target, for which unauthorized reception can have far reaching effects. It is for this reason that highly secure systems are employed for both the scrambling subsystem and access control subsystem.

The general requirements that scrambling systems must satisfy are as follows:

(1) it must be difficult for a third party to perform unauthorized reception (security);
(2) scrambled signal content must not be understandable (concealment);
(3) quality must not deteriorate (perceptibly) on restoring the signal (quality restoration); and
(4) receiver and operating costs must be low.

In digital broadcasting, moreover,
(5) efficient scrambling of all kinds of signals (as in multimedia broadcasts) must be possible, and
(6) various business formats such as multi-channel services and billing schemes must be supported.

2. Configuration of a conditional access system

Although a conditional access system can be achieved in

Figure 1: Configuration of a conditional access system

EX2031, at 1; EX2040, ¶68.

Indeed, Dr. Bederson has previously testified that digital broadcast is typically encrypted:

> Q. I'm saying like the data you mentioned which typically should be encrypted, does that include the broadcast -- digital broadcast data, also?
>
> A. Yes, it does.

EX2036, at 30:3-7). In addition, in the District Court Dr. Bederson further confirmed that encryption is typically applied to data before transmission:

> 31. Third, from a technical perspective, a person of ordinary skill in the art would understand that encryption is a process typically (but, as discussed below, not always) applied to data before transmission to a receiving device in order to protect the data during transit. This can be seen, for example, in the documents cited by Plaintiff in the parties' P.R. 4-3 chart, which discuss encryption of pay television content. *See, e.g.*, Broadcast Encryption, Dave Lassalle, January 12, 2005[1] (Ex. A). It would be technically logical to a POSITA that the second video information is already in an encrypted state when it is received. This understanding of the plain

EX2037, ¶37. As such, Term 1 is fully supported by the Japanese priority application at least as of December, 2004. EX2040, ¶70.

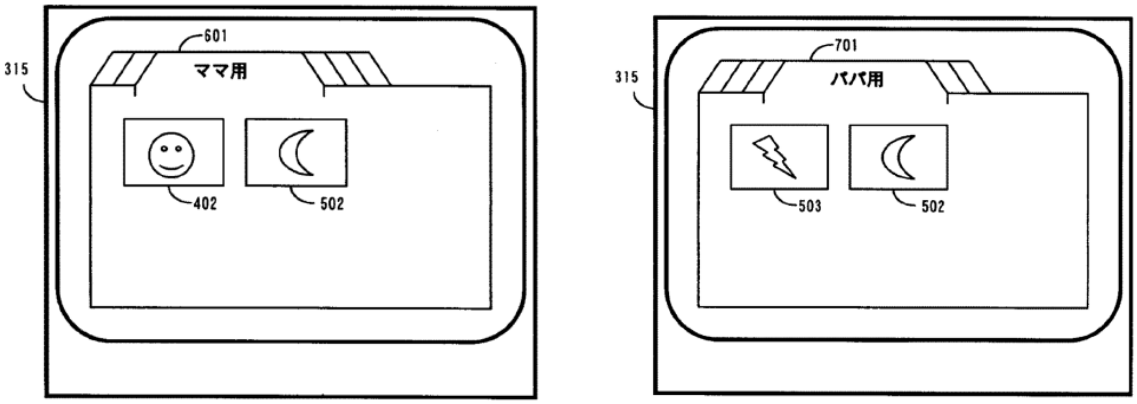
With respect to Term 2, the "upon the one video being removed" is disclosed in the priority application at least in the following:

> 402 and 502 are the thumbnails showing program information #1 and playlist information #1, as can be seen from FIG. 1. "Mom" can freely register and delete data to be played back, using the mom menu display tag 601 as her own folder.
>
> 503 and 502 are the thumbnails for playlist information #2 and playlist information #1, as can be seen from FIG. 1. In this case, "dad" has selected two playlists and can change the playback order. As with "mom" above, "dad" can freely register and delete data to be played back, using the dad menu display tag 701 as his own folder.

EX2019, at ¶¶[0024]-[0025]; EX2040, ¶¶71-72.

With respect to Term 3, the “user profile” limitation is disclosed in the priority application:

> Next, FIG. 6 is an example of a menu display using integrated user defined information #1 in FIG. 1. 601 is a user #1 (here being "mom") menu display tag, and 402 and 502 are the thumbnails showing program information #1 and playlist information #1, as can be seen from FIG. 1. "Mom" can freely register and delete data to be played back, using the mom menu display tag 601 as her own folder.
>
> Similarly, FIG. 7 is an example of a menu display using integrated user defined information #2 in FIG. 1. 701 is a user #2 (here being "dad") menu display tag, and 503 and 502 are the thumbnails for playlist information #2 and playlist information #1, as can be seen from FIG. 1. In this case, "dad" has selected two playlists and can change the playback order. As with "mom" above, "dad" can freely register and delete data to be played back, using the dad menu display tag 701 as his own folder.



EX2019, at ¶¶[0024]-[0025]; Figs. 6-7; EX2040, ¶¶73-74.

Terms 1-3 are well supported in the priority application, and certainly by 2004.

D. Person Of Ordinary Skill In The Art

The Board found in the ID that a POSITA:

> would have held a bachelor's degree in Computer Science, Electrical Engineering, and Computer Engineering, or a related field, and two years of practical experience in digital data management.

ID at 8. The difference between the Board's definition and Patent Owner's (EX2040, ¶53) does not change the arguments set forth herein.

E. Instituted Grounds

The Board instituted review on five grounds

Ground	'815 Patent Claim(s)	Type of Challenge	Primary Reference	Secondary Reference(s)
6	16-19, 21-25	§ 103	Horn	(1)Baumgartner (2) Candelore
7	20, 26, 27	§ 103	Horn	(1)Baumgartner (2) Candelore (3) WinTV
8	16-27	§ 103	Horn	(1)Baumgartner (2) Candelore (3) WinTV (4) Chao
9	16-19, 21-25	§ 103	Kaplan	(1) Bryant (2) Wong (3) Candelore
10	20, 26, 27	§ 103	Kaplan	(1) Bryant (2) Wong (3) Candelore (4) WinTV

III. CLAIM CONSTRUCTION

For this proceeding, the Board has adopted the following construction:

Claim Term	Construction
"user profile(s)"	"data representing a user's distinctive features or characteristics"

In the related District Court Litigation, the court also provided construction for the "user profile(s)" term:

Claim Term	District Court Construction
"user profile(s)"	"a collection of settings and information associated with a user"

The court specifically noted that the term "user profile" has a well-known ordinary meaning, which is further reinforced by multiple dictionary definitions. This reinforces that the concept of a "user profile" is widely understood in the field and does not require an alternative or ambiguous interpretation.

Accordingly, Patent Owner contends the court's construction of the term "user profile" more closely aligns with the plain and ordinary meaning of the term. EX2040, ¶39-40. This ensures consistency and prevents any misinterpretation of the term beyond its widely accepted meaning. Moreover, the Court's construction of "user profile" is supported by the '815 Patent's specification, as well as the priority applications. EX2040, ¶¶73-80. For example, while the precise term "user profile"

is not used *in haec verba* in the specification, it discloses user "dedicated" folders where each user can store its playlists according to his/her preferences. EX1001, at 6:21-40 and Figs 1, 6-7 where "mother" and "father" are shown to have user dedicated folders supporting their profiles); *see also* Ex. 2019, at ¶¶[0024]-[0025] and Figs 1, 6-7; EX2040, ¶74.

FIG.6

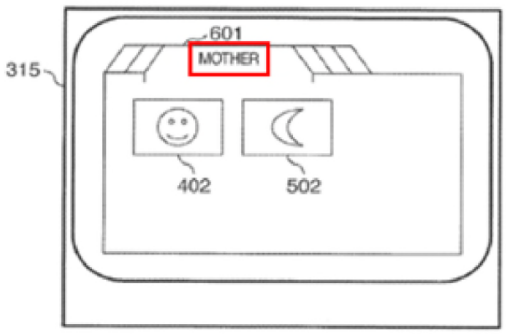
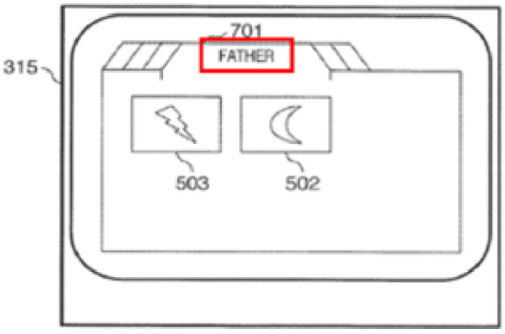


FIG.7



Further, the '815 Patent also discloses that these user dedicated folders are possible by the use of hierarchical data directories with a "Root" directory followed by "user-defined unification information" and "contents of user-defined information" grouped to "meet respective users' tastes by using one user-defined

unified information [for] every user." *See* EX1001, 4:35-39; EX2019, at ¶[0027] . *See also* Figs. 8 and 9 and corresponding descriptions to show how the '815 Patent discloses the concept of a user profile consistent with the usage of root directories and folders, used for example to implement user profiles by a POSITA in Windows NT at that time. EX2039 (User's Guide for Microsoft 95 and Windows NT).

Patent Owner has also construed the following term:

Claim Term	Construction
"in response to the selection of the first user profile, the display displays a second user interface for a user to select desired video information to be reproduced from among the first video information." Claims 16 and 21	"in response to the selection of the first user profile, the display displays a new second user dedicated screen for a user to select desired video information to be reproduced from among the first video information"

Both independent claims 16 and 21 require the processor, in response to the selection of a user profile, to display a new, user-dedicated screen that allows the user to select video information. The claims, specification, and figures of the '815 Patent explicitly establish that the second interface is distinct from the first interface and appears on a new screen. EX2040, ¶42. For instance, *see* EX1001 at 6:19-41 and Figures 4-7. Notably, Figures 5 and 6 illustrate a new user-dedicated interface/screen that presents user-defined information for selection:

> FIG. 6 shows an example in which **menu display is conducted by using the user-defined unified information #1** shown in FIG. 1.

> Reference numeral 601 designates a menu display tag for user #1 (who is supposed to be "mother" here). As appreciated from FIG. 1, reference numerals 402 and 502 designate thumbnails indicating the program information #1 and the play list information #1, respectively. The "mother" can use the menu display tag for mother 601 as **a folder dedicated to herself**, and freely register and delete data to be reproduced. In the same way, FIG. 7 shows an example in which **menu display is conducted by using the user-defined unified information #2** shown in FIG. 1. Reference numeral 701 designates a menu display tag for user #2 (who is supposed to be "father" here). As appreciated from FIG. 1, reference numerals 503 and 502 designate thumbnails indicating the play list information #2 and the play list information #1, respectively. In this case, the "father" selects two play lists. However, the reproduction sequence of them can be altered. In the same way as the "mother," the "father" can use the menu display tag for father 701 **as a folder dedicated to himself**, and freely register and delete data to be reproduced.

EX1001 at 6:19-41; EX2040, ¶42.

FIG.6

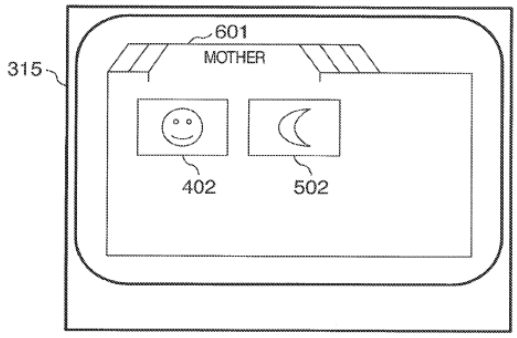
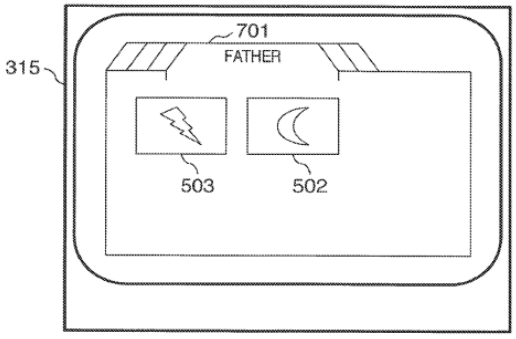


FIG.7



Ex. 1001 at Figs. 6 and 7. A POSITA, when reading claims 16 and 21 in their entirety, would understand that the second interface refers to a new screen separate from the first user interface. EX2040, ¶42. This new screen displays user-specific information, as further evidenced by the claims' requirement that the second interface includes a character identifying the user associated with the selected user profile:

> the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user of the first user profile.

EX1001 at Claims 16 and 21 (limitations (21f) and (16g)).

Additionally, a POSITA would interpret this claim limitation to mean that the second interface must be a new screen because the characters identifying the user profile are already present in the first interface. EX2040, ¶43. The only logical purpose for requiring these identifying characters in the second interface is that it operates as a new screen distinct from the first, which does not carry over the information from the first interface. *Id.*

Accordingly, Patent Owner proposes that "in response to the selection of the first user profile, the display displays a second user interface for a user to select desired video information to be reproduced from among the first video information"

be construed as "in response to the selection of the first user profile, the display displays a new second user dedicated screen for a user to select desired video information to be reproduced from among the first video information."

In the related District Court Litigation, the court also provided construction for "the processor generates a group of video information based on user preferences determined by the user selections of the video information" term:

Claim Term	District Court Construction
"the processor generates a group of video information based on user preferences determined by the user selections of the video information"	"generating a group of video information that includes (i) only video information that has previously been selected by a user, (ii) only video information that has not previously been selected by a user, or (iii) a mix of video information including video information that has been previously selected by a user and video information not previously selected by a user"

The court adopted Samsung's construction for this term. EX2033, at 9. Samsung's interpretation of "generating a list of video information" is consistent with Maxell's own interpretation of the claim. EX2040, ¶47. Specifically, "generating a list of video information based on preferences of a user" aligns with the understanding that this phrase refers to generating a recommendation video list:

> Samsung's construction aligns with the meaning that Maxell employed in its infringement contentions, which identify: (i) a group of video information including information previously selected by the user, which corresponds to group type (i) in Samsung's construction (Ex. B, p. 169 ("User's Preferences are indicated based on user selections of three videos and selecting 'Copy' or 'Move' to album")); and (ii) a group of video information including "recommended" videos, which is information not previously selected by user that corresponds to group type (ii) in Samsung's construction (*id*. at p. 676 ("Netflix provides recommendations with a list based on a user's watch history that corresponds to user selections.")). Group type (iii) was included in Samsung's construction in response to Maxell's assertion during the meet and confer process that Netflix's recommendations were not limited to previously unselected videos.
>
> Notably, Maxell's opening brief never argues that any of these three group types is incorrect, nor does it identify any video information incorrectly excluded from Samsung's construction. There is thus no dispute that Samsung's construction is correct.

EX2034 at 2-3; EX2040, ¶47.

Additionally, the '815 Patent specification supports the parties' understanding that "generating a list of video information based on preferences of a user" refers to "generating a recommendation video list":

> For example, when a plurality of users use a single recording medium, it becomes possible to manage reproduced contents that meet respective users' **tastes** by using one user-defined unified information every user.

EX1001 at 4:35-39 (emphasis added).

> In the case where the number of play lists has become very large, a play list that is high in **user's use frequency** can be displayed in the first place in the GUI view.

EX1001 at 8:23-26 (emphasis added); EX2040, ¶48.

Accordingly, Patent Owner has applied the construction that is "generating a group of video information, which is video recommendation list, that includes (i) only video information that has previously been selected by a user, (ii) only video information that has not previously been selected by a user, or (iii) a mix of video information including video information that has been previously selected by a user and video information not previously selected by a user."

IV. ANALYIS OF INSTITUTED GROUNDS

A. Ground 6: Petitioner Has Failed to Establish That Claims 16-19 and 21-25 are Rendered Obvious By Horn in View of Baumgartner and Candelore

Petitioner has not shown a likelihood of prevailing because Horn in view of Baumgartner does not teach each and every element of Claims 16-19 and 21-25. EX2040, ¶189. Specifically, Horn in combination with Baumgartner and Candelore does not teach each and every element of claim 16 and 21. Additionally, because dependent claims 17-19 and 22-25 depend from claims that Petitioner has not shown to be unpatentable, Petitioner has also failed to show that claims 17-19 and 22-25 are unpatentable by Horn in view of Baumgartner and Candelore.

1. No Motivation to Combine Horn with Baumgartner

At the time of the ’815 Patent, it would not have been obvious to a POSITA to combine Horn with Baumgartner. Petitioner’s statement as to why Horn and Baumgartner should be combined is conclusory and unsupported by sufficient evidence and analysis. EX2020, ¶190.

A POSITA would not be motivated to combine Horn with Baumgartner because they are two different systems. *Id.*, ¶191. The problem solved by Horn is unrelated to the technical problems addressed by Baumgartner. *Id.* Horn discloses a “truly **open computer system** having data structures, input interfaces, displays and operational systems that permits the organization of information, as data objects” and permit a “**faster archiving** , retrieval and viewing of the information.” EX1005, 3:10-17 (emphasis added). Moreover, Horn proposes a computer data processing system that has a “**simple-to-use** data structure and operating mechanism to link information together in a dynamic, memory-and- space-efficient manner.” EX1005, 3:19-22 (emphasis added). In contrast, Baumgartner discloses an “interactive television system” that uses a set-top box to access and request video-on-demand programming. EX1016, Abstract. A POSITA would not be motivated to combine the components from Baumgartner’s set-top box system to Horn’s simple-to-use computer file system, because Horn is directed to making “collections” based on

keywords in documents, and is not directed to making any video-on-demand collections based on a user watch history. EX2040, ¶191.

Additionally, Petitioner fails to provide any rationale as to why a POSITA would substitute the hardwired LAN of Horn with the wireless modem of Baumgartner. EX2040, ¶192. Petitioner simply provides a conclusory statement that "a POSITA would have found it obvious to implement Horn's LAN with a wireless LAN because they were often cheaper and easier to install than a wired LAN due to elimination of the need to run wires to all of the endpoint computers in the network." Pet. at 28. Petitioner's conclusory statements are insufficient and provide no factual support. *See In re Nuvasive, Inc.,* 842 F.3d 1376, 1383 (Fed. Cir. 2016) (conclusory statements are "insufficient articulations of motivation to combine" references). In fact, Petitioner's assertion that wireless LAN was cheaper at the time of the '815 Patent's invention is also unsupported. EX2040, ¶192. For example, publicly available information shows that at the time of the '815 Patent's invention the price of wireless PC card and wireless access point was more than $300 (EX2024), as compared to the wired LAN card that cost on average less than $50 (EX2025). Petitioner's assertion regarding the costs involved might be true today but not around the early 2000's. Today of course a wireless solution may be more cost effective, but not at the time of the '815 invention (Dec. 2004). EX2040, ¶192.

Petitioner states that a POSITA would have considered obvious to include the wireless communication from Baumgartner in Horn. Pet. at 21-22. This is incorrect. *Id.*, ¶193. Specifically, Petitioner's analysis of the Horn system is fundamentally flawed because it fails to evaluate the system within the proper context of the prior art. Specifically, the Horn system is a **specialized, server-based computer** running the Metadata Filing System (MFS), **not just a general-purpose or personal computer**. Rather than assessing the technology in light of its intended enterprise environment, Petitioner applies his analysis to a general-purpose or personal computer and assumes that a wireless LAN would be beneficial. This mischaracterization leads to incorrect conclusions that are not supported by the Horn's disclosure. EX2040, ¶194.

For example, Horn's MFS is designed for **high-performance, data-intensive computing**, a characteristic that distinguishes it from general-purpose computers, which are optimized for single-user, lower-complexity tasks. Horn's system's architecture and functionality indicate that it is a robust, server-based solution that is intended to handle large volumes of data. EX1005, 6:59-63. A POSITA evaluating the Horn disclosure would immediately recognize that the system is a server-based solution designed for large-scale data processing and management. This conclusion is evident from several key factors in the system's disclosure. EX2040, ¶195.

First, the Horn system is not a simple general-purpose computer but a dedicated server architecture specifically designed for **automatic organization, indexing, and retrieval** of data from multiple sources. EX1005, 3:10-17. The emphasis on handling vast amounts of structured data further supports the conclusion that the system is a server-based architecture rather than a consumer-grade or personal-use system. EX2040, ¶196.

Second, the system's capabilities align with enterprise-level data management, including aggregating data from multiple inputs, performing complex indexing operations, and providing structured data views. These are defining characteristics of server-based computing environments—features that are neither typical nor necessary for general-purpose personal computers, which primarily function for localized, single-user tasks. *Id.*, ¶197.

The architectural framework described in the Horn disclosure supports **high availability, scalability, and efficient handling** of extensive data volumes. Such design considerations are commonly associated with enterprise data centers, further reinforcing that the Horn system is a server-based computing environment requiring a high-performance infrastructure. *Id.*, ¶198.

Thus, Petitioner's assumption that a wireless LAN is a suitable alternative to a wired connection is inconsistent with the Horn system's technical and operational requirements. The system requires advanced reliability, stability, and security, all of

which are best provided by a wired LAN. EX2040, ¶199. A POSITA would understand that from performance standpoint, wired networks provide a more **stable and reliable** connection with lower packet loss and reduced latency, which is critical for high-throughput enterprise computing. *Id.*, ¶200. In contrast, wireless networks are inherently vulnerable to interference, congestion, and signal degradation, making them highly unreliable for large-scale, high-performance data environments like the Horn system. *Id.*

Moreover, Horn's real-time indexing and retrieval of high data volumes necessitate low-latency, high-speed communication. Wired networks are specifically designed to minimize latency, ensuring efficient and predictable data transmission. Wireless networks, on the other hand, introduce variable latency and bandwidth limitations, which would severely impact system performance and render wireless connectivity unsuitable for Horn's operational needs. *Id.*, ¶201.

On cross-examination, Dr. Bederson admitted that if a system's goal (like Horn's—EX1005, 3:10-17) is to permit faster archiving, retrieval and viewing information then it is better to transfer data at higher speeds:

> Q: If you had a computer system whose goal is to permit faster archiving, retrieval and viewing of information, would it be better to have the data transferred at higher speeds or lower speeds?
>
> A: If your goal was faster communication, then I would think **faster**

> **communication speeds probably would help you address that goal more readily.**

EX2038, at 51:22-52:8 (emphasis added).

A POSITA would have understood that at the time of the '815 Patent the speed and bandwidth of wireless communication was much slower than that of the cable LAN, and hence Baumgartner's wireless communication would not be appropriate for Horn's distributed computer system that **requires** higher speed and bandwidth to **"faster"** retrieve and view information on a communication network. EX2040, ¶202. In particular, at the time of the '815 Patent, the wireless communication protocols (802.11b/g) offered communication speeds much slower than that of wired ethernet:

The current standard: 802.11b

Standards insure that wireless networks that consist of components from several different vendors will work properly. Theoretically, cards manufactured by one company will work with an access point from another company. The current standard for wireless networks is known as 802.11b. This standard is in the same family as Ethernet, generally known by the designation 802.3.

Equipment that follows 802.11b standard will be capable of a theoretical data throughput rate of 11 mb/sec. This level of bandwidth is quite respectable, given that many wired networks continue to operate at 10mb/sec. The actual usable bandwidth averages about half the theoretical, though.

The previous generation of wireless networks operated at 2-3 mb/sec. Not surprisingly, wireless networks did not become popular until the emergence of the 802.11b standard that increased the data flow to 11 mb/sec. The emerging 802.11a standard, expected to find more common use in the next 1-2 years, will deliver data at 54MB/sec.

Still a Niche product

Despite the steadily increasing speed of wireless technology, wired networks will always outperform them by long strides. Today 100mb/sec Ethernet cards prevail in most business LANs, with Gigabit Ethernet (1024 mb/sec) finding common use as network backbones and for connecting high-performance servers. 10 GB/sec Ethernet for fibre-based networks is already on the horizon.

EX2026; EX2040, ¶202.

Security is another critical concern that Petitioner's analysis fails to address adequately. The Horn system is explicitly designed for data aggregation and

management, making **data integrity and security paramount**. EX1005, 19:25-60, 5:47-60. A POSITA would have understood that network security is important to Horn's system as it stores user data and could host websites. EX1005, 19:25-60, 5:47-60. In particular, Dr. Bederson agreed on cross-examination that one of ordinary skill in the art would be aware of the importance of data security for Horn's system:

> Q: In Horn's system, Exhibit 1005, does Horn store user data?
> A: Yes, I believe it does.
> Q: Does Horn's system host websites?
> A: I don't recall if it does.
> Q: Just take a look at column 5, line 47, and the subsequent sentences.
> A: Okay, I see that, and I do see that Horn discloses hosting internet pages.
> Q: So in 2024, in a system such as Horn's, would data security be important to one of skill in the art?
> A: Well, I think in 2004, data security was certainly less important, less top of mind than it is today. But I think a person of skill in the art would at least have some awareness of data security.

EX2038, at 52:9-53:4.

Wired LANs offer a superior security framework by eliminating risks associated with wireless transmissions, such as hacking, data interception, and unauthorized access. EX2040, ¶204. Wireless LANs, especially those in 2004, were

significantly more vulnerable to security breaches, further supporting the conclusion that Horn's intended infrastructure is wired, not wireless.

Security problems remain

Organizations that implement wireless networks have to consider the security implications. Wireless networks suffer from the same basic weakness as wired networks, where some unknown party might be listening in on the network conversation. Any information transported across a network must be encrypted to ensure that it remains private. The problem is amplified in wireless networks since anyone with the right equipment in physical proximity might be able to capture your network traffic, gain unprotected passwords, and launch an attack on your computers.

The 802.11b standard includes provision for protecting data transmissions through the use of encryption. The standard includes a security layer called Wired Equivalency Privacy (WEP) that uses a private key in its encryption. Many wireless networks have been installed without implementing this security feature. The security available on encrypted wireless LANs should be considered as weak, since it has recently been demonstrated that any third party capturing network packets off an access point can fairly easily determine the keys needed to decrypt network traffic.

The basic lesson for wireless networks is to avoid their use by computers with highly confidential or proprietary information. Assume that an unknown third party can intercept any information that isn't separately protected with strong encryption. As with wired network, never transmit a password that provides root or administrative access unless it is protected through strong encryption.

EX2026.

In addition, Petitioner's argument for wireless LAN based on mobility (*See* EX2038, at 102:7-20) is entirely misplaced and not supported by the Horn disclosure. EX2040, ¶205. The Horn system is a mainframe server running the MFS—it is not a mobile system nor does the patent suggest any mobility requirements. EX1005, 6:59-63; EX2040, ¶205. A POSITA reviewing the Horn disclosure would find no indication that mobility is a relevant factor in the system's design. EX2040, ¶205. The enterprise-level nature of the system, its focus on large-scale data management, and its reliance on stable, high-throughput processing all point toward a fixed, stationary computing environment. EX1005, 7:7-10. As such, there is no justification or motivation for implementing wireless networking, reinforcing that a wired infrastructure is both the intended and optimal choice. EX2040, ¶205.

Given its specific design, integrating wireless LAN would introduce unnecessary performance bottlenecks, security vulnerabilities, and operational inefficiencies, making it an impractical and unjustifiable choice for such an infrastructure. EX2040, ¶¶206-207.

Therefore, a POSITA would not have considered it obvious to combine Baumgartner with Horn.

2. The Combination of Horn, Baumgartner, and Candelore Fails to Disclose Limitation 16[a] and 21[a]

Petitioner fail to show that that Horn in combination with Baumgartner and Candelore discloses claim elements 16[a] and 21[a]: receiving, via a network, first video information wirelessly from a device external to the information processing apparatus, the first video information being received including second video information that is encrypted. EX2040, ¶209.

Specifically, Petitioner admits that "Horn does not expressly disclose receiving digital video information wirelessly." Pet. at 27. In fact, Horn does not even disclose receiving video, let alone receiving it wirelessly. Horn discloses receiving files, music and images: "[t]he e-mail domain is linked through a network for the communication of files, music and images to and from a network." EX1005, 12:5-7. This is because Horn is focused on providing a "space-saving" file system, and not a system like videos that would use up too much storage. EX2040, ¶210.

Petitioner tries to plug this deficiency by simply pointing to Horn's LAN. Pet. at 27-28. Specifically, Petitioner attempts to use Baumgartner to fill this gap in the teachings of Horn. However, a POSITA wouldn't be motivated to combine Baumgartner with Horn. EX2040, ¶211. As discussed above, at the time of the '815 Patent, it would not have been obvious to a POSITA to combine Baumgartner with Horn because they are solving different problems and hence directed to different solutions, and the wireless LAN is not necessarily cheaper (e.g., a wireless LAN card is more expensive than a wired LAN card at the time of the patent) as Petitioner claims.

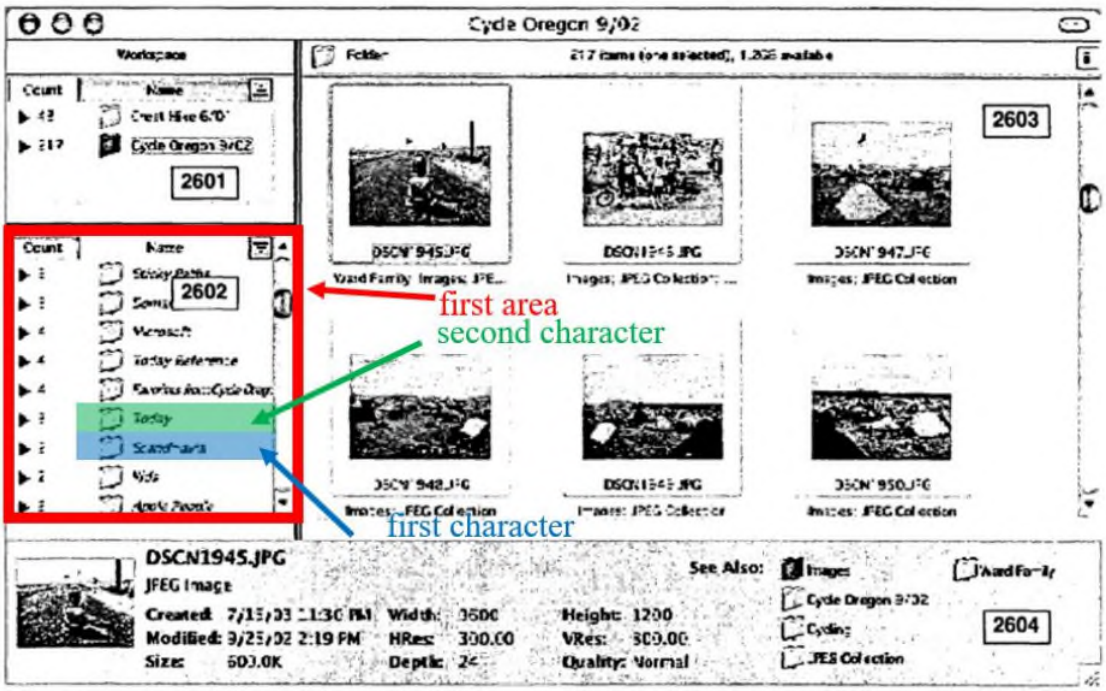
Therefore, because Petitioner has not shown Horn in view of Baumgartner and Candelore discloses claim elements 16[a] and 21[a], Petitioner failed to show unpatentability by a preponderance of the evidence for any claim in Ground 6.

3. The Combination of Horn, Baumgartner, and Candelore Fails to Disclose Limitation 16[b] and 21[b]

Petitioner fails to show that Horn in combination with Baumgartner and Candelore discloses "displaying, on a display device, a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character" as required by claim elements 16[b] and 21[b]. EX2040, ¶213.

In particular, Horn's disclosure falls short by failing to present a user interface that enables a user to select a profile from multiple user profiles. Petitioner attempts to bridge this gap by referencing features from Baumgartner. However, even Petitioner admits that "Baumgartner does not provide additional details on how to implement such user profile buttons." Pet. at 32. Without explicit guidance from Baumgartner, it would not have been obvious to a POSITA to implement in Horn the user profile buttons as described in Baumgartner. EX2040, ¶214.

Moreover, Petitioner's reliance on modification to panes 2601 and 2602 in Horn's Workspace is misguided and lacks substantiation. The suggestion to add buttons labeled with user names for profile selection appears arbitrary and unsupported. *Id.*, ¶215. An analysis of Horn's Figure 26 (below), which illustrates the Workspace, shows no clear rationale or incentive for a POSITA to introduce additional buttons or information in these sections. Petitioner's recommendation is speculative and fails to provide a convincing basis for why such modifications would be necessary or obvious to a POSITA. Therefore, Petitioner's argument lacks merit and should not be considered a valid resolution to the deficiencies in Horn's disclosure. *Id.*



EX1005 at Fig. 26.

Therefore, Petitioner failed to show unpatentability by a preponderance of the evidence for any claim in Ground 6.

4. The Combination of Horn, Baumgartner, and Candelore Fails to Disclose Limitation 16[e], 16[f], 16[g], 16[h], 21[e], 21[f], 21[g], and 21[h]

Petitioner fails to show that Horn in combination with Baumgartner discloses claim element 16[e] and 21[e]: "displaying, in response to the selection, a second user interface for a user to select desired video information to be reproduced from among the first video information."

Petitioner points to Horn's Workspace view as a second user interface. Pet. at 36. However, Horn's Workspace view cannot be the second user interface as the

Petitioner already selected it as a first user interface. Pet. at 32. In particular, ’815 Patent discloses the first and second user interfaces as two separate display screens. EX2040, ¶218. As discussed above, the claims, specification, and figures of the ’815 Patent explicitly establish that the second interface is distinct from the first interface and appears on a new screen. *See* EX1001 at 6:19-41 and Figures 4-7.

In particular, a POSITA, when reading claims 16 and 21 in their entirety, would understand that the second interface refers to a new screen separate from the first user interface. EX2040, ¶219. This new screen displays user-specific information, as further evidenced by the claims' requirement that the second interface includes a character identifying the user associated with the selected user profile:

> the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user of the first user profile.

EX1001 at Claims 16 and 21 (limitations (21f) and (16g)).

Additionally, a POSITA would interpret this claim limitation to mean that the second interface must be a new screen because the characters identifying the user profile are already present in the first interface. EX2040, ¶220. The only logical purpose for requiring these identifying characters in the second interface is that it

operates as a new screen distinct from the first, which does not carry over the information from the first interface. *Id.*

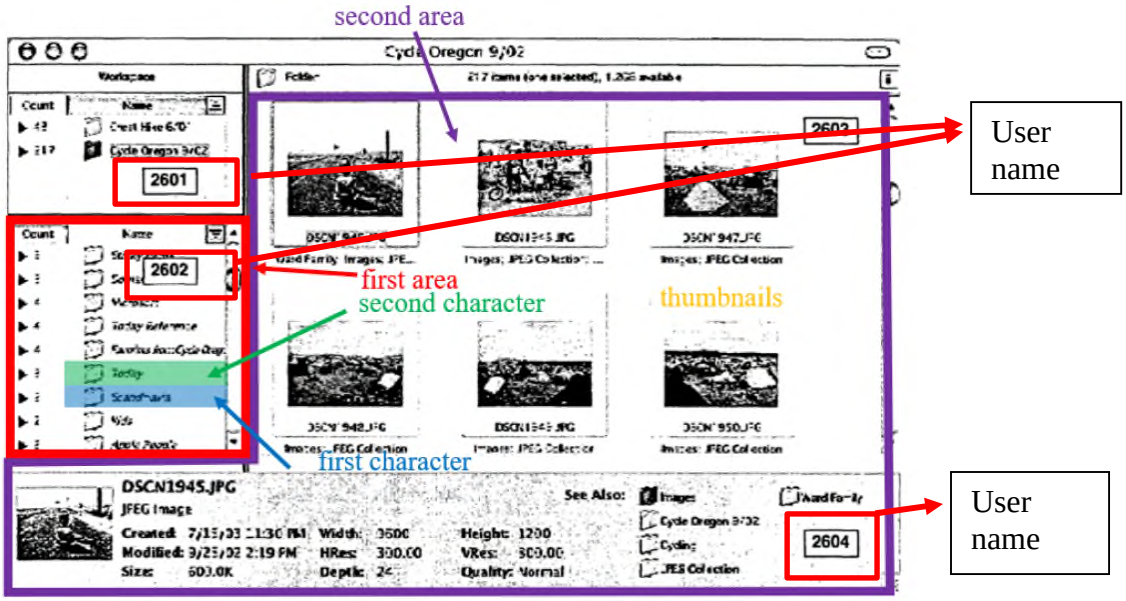
Even if we were to assume, *arguendo*, that Horn's Workspace view discloses the second interface—which it does not—the Horn-Baumgartner combination still fails to satisfy the claim limitation requiring "displaying, in response to the selection, a second user interface for a user to select desired video information to be reproduced from among the first video information," as specified in claim element 16[e]. *Id.*, ¶221.

Specifically, if Baumgartner's user profile feature is incorporated into Horn, the result is that, upon the selection of a user profile, Horn would only display the folders or content associated with that profile within the first interface (panes 2601/2602). EX2040, ¶222. It would not display content in the second interface (pane 2603) as required by the claim. Instead, content in pane 2603 is displayed only in response to a user selecting a specific folder or item from the first interface. *Id.*, ¶222; *see also* EX1005 at 19:41-57.

Specifically, a POSITA reading this disclosure would understand that pane 2603 only displays the contents of "whatever item is selected" in panes 2601 and/or 2602. EX2040, ¶223. Therefore, if the user changes the selected user profile, it merely updates the folders or content displayed in panes 2601 and 2602. No content would appear in pane 2603 (the dynamic content pane) unless the user explicitly

selects a folder or item from panes 2601 or 2602. Consequently, Horn's Workspace view does not meet the claimed requirement for a second user interface that displays desired video information in response to a user profile selection. *Id.*

Further, regarding the "the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user of the first user profile" limitation as required by the claim element 16[f], Petitioner admits that "[t]he second user interface/second area of Horn's Workspace view in Fig. 26 above does not explicitly show the user name associated with the user profile to which the content in the content pane 2603 pertains, but doing so would have been obvious to a user." Pet. at 37. Petitioner further states that "a POSITA would have found it obvious to include the user name in the metadata pane 2604." Pet. at 37-38.



EX1005 at Fig. 26.

As previously discussed, the Horn-Baumgartner combination fails to disclose the second interface required by claims 16 and 21 of the ’815 Patent. A POSITA would lack any motivation to add a username to the Workspace view interface since the Petitioner have already integrated the username into panes 2601 and/or 2602. Pet. at 32. Specifically, a POSITA would understand that adding usernames multiple times to the same user interface or screen undermines the teachings of the invention claimed in the ’815 Patent. EX2040, ¶225. Claims 16 and 21 are explicitly directed toward two distinct user interfaces or screens, each designed to display the username characters for identifying the user on a specific interface or screen. In contrast, there would be no reason to repeatedly display the user name in the different panels of Fig 26 of EX1005 as there is no ambiguity as to the identity of the user in its four panes. By suggesting the redisplay of the user’s name multiple times in a single interface, Petitioner contradicts the fundamental design and intended functionality of the ’815 Patent, and thereby a POSITA would not be motivated to modify Horn’s Workspace view screen to arrive at the ‘815 patent’s teachings. *Id.*

For the same reasons discussed above, Petitioner fails to show that Horn in combination with Baumgartner discloses claim element 16[h] and 21[h]: “displaying the second character and a second group of thumbnails corresponding to a second

group of video information associated with the second user profile when the second character is selected." EX2040, ¶226.

Therefore, Petitioner failed to show unpatentability by a preponderance of the evidence for any claim in Ground 6.

5. The Combination of Horn, Baumgartner, and Candelore Fails to Disclose Limitation 16[i], 16[j], 16[k], 16[l], 21[i], 21[j], and 21[k]

Petitioner fails to show that Horn in combination with Baumgartner discloses claim element 16[i] and 21[i]: "the first group of video information and the second group of video information including one video information that is the same."

As a threshold issue, Petitioner appears to misunderstand the limitations of claim 16. The claim explicitly requires that the first group of video information, associated with the first user profile (claim element 16[f]), and the second group of video information, associated with the second user profile (claim element 16[h]), include one video that is the same (claim element 16[i]). However, Petitioner relies on Horn's collections rather than user profiles. Pet. at 40. Collections, as disclosed by Horn, are not equivalent to user profiles. EX2040, ¶229. Specifically, Horn defines a collection as:

> Collection: means a grouping of objects based on a metadata specification describing properties that all objects in the group have in common, or objects that were grouped together specifically by the user as having some shared meaning or logical grouping.

EX1005 at 4:1-5. This definition clearly differentiates collections from user profiles, as collections are metadata-based groupings or manually defined groupings—not user-specific profiles as required by the claims. EX2040, ¶230.

Moreover, Petitioner fails to establish that the combination of Horn and Baumgartner discloses claim element 16[k]: "removing the one video information from the first group of video information … the one video information continues to be included in the second group of video information for the second user profile." Instead, Petitioner relies on Horn's collections for removal of content (Pet. at 41), but fails to explain how Horn's collections function across multiple user profiles, as disclosed by Baumgartner. EX2040, ¶231.

Critically, Petitioner does not identify any disclosure in Horn or Baumgartner showing that removing a video from the first group (associated with the first profile) results in the video remaining in the second group (associated with the second profile). *Id.*, ¶232. Furthermore, Petitioner provides no analysis of the final portion of element 16[k], which requires that "the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected." *Id.*

Petitioner remains silent on this aspect, likely because, neither Horn nor Baumgartner discloses this limitation. *Id.*, ¶233. While Horn discusses collections and Baumgartner mentions multiple user profiles, neither explains how removing

content from one user profile impacts other profiles or how video thumbnails are displayed across profiles after removal. *Id.*

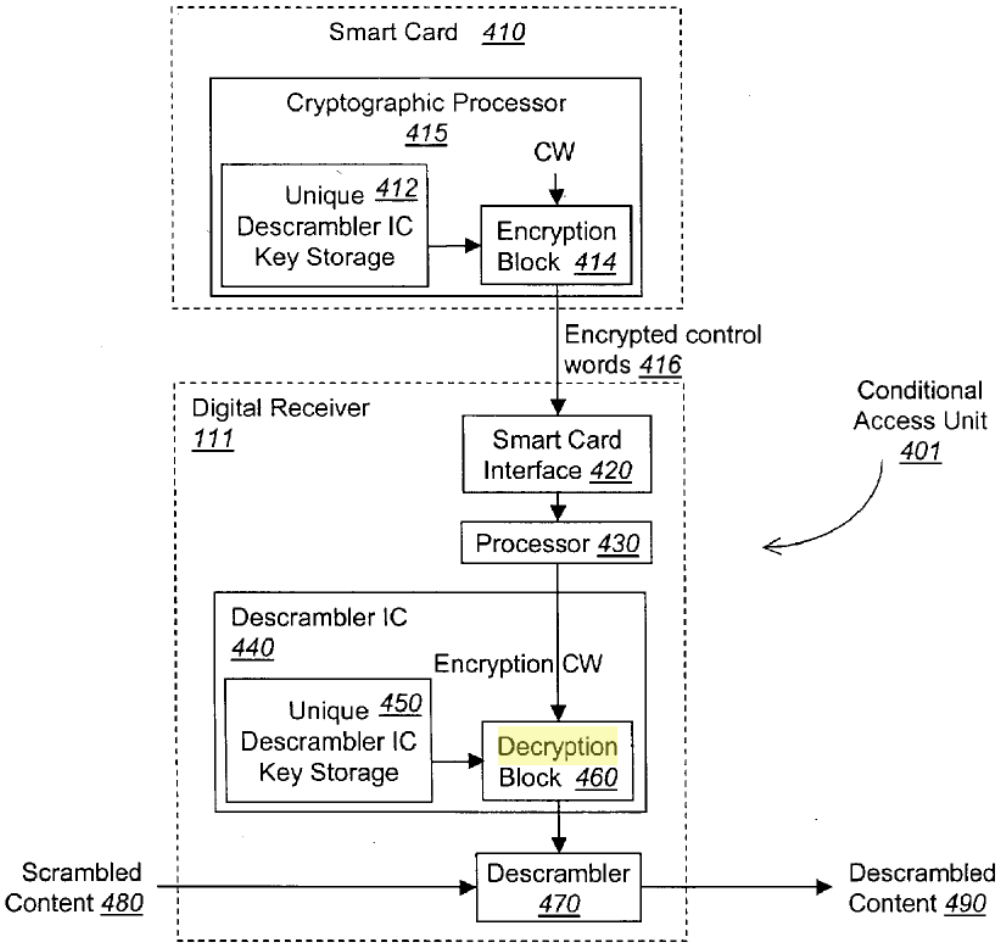
For the same reasons discussed above, Petitioner fails to show that Horn in combination with Baumgartner discloses claim element 16[j] "receiving a selection to remove the one video information from the first group of video information associated with the first user profile," and claim element 16[l] "receiving a selection of desired video information based on a selection of a thumbnail from the first group of thumbnails, the desired video information included in the second video information."

In sum, Petitioner's arguments are conclusory and unsupported. The combination of Horn and Baumgartner fails to satisfy the specific limitations of claim elements 16[i], 16[j], 16[k], 16[l], 21[i], 21[j], and 21[k], as required by the claims 16 and 21.

6. The Combination of Horn, Baumgartner, and Candelore Fails to Disclose Limitation 16[m], 21[l], and 21[m]

Petitioner fails to show that Horn in combination with Baumgartner and Candelore discloses claim elements 16[m]/21[l]: "decrypting video information corresponding to the selected thumbnail; and displaying the decrypted video information," and 21[m]: "wherein the display displays the decrypted video information."

In particular, the Horn and Baumgartner disclosures fall short by failing to provide decryption of video information and displaying the decrypted video. EX2040, ¶237. Petitioner attempts to bridge this gap by referencing features from Candelore. However, Candelore discloses a very specific hardware to decrypt the video content in a set-top box that a POSITA would not have found obvious to include in the Horn-Baumgartner system as Petitioner suggest:



EX1013, at Fig. 2.

A POSITA would not have a reasonable expectation of success in the combination because decryption in Candelore is performed by an "embedded" IC—an embedded IC that is required to co-work with a "smart card" to perform the decryption—that a POSITA simply cannot pick and put in another system. Specifically, Horn-Baumgartner does not suggest any benefit to such a combination, and without a clear teaching or motivation, Petitioner's argument is based purely on hindsight. EX2040, ¶238. In particular, Petitioner's proposed combination would require modifying Horn-Baumgartner's architecture in a way that is fundamentally incompatible with Candelore's embedded IC decryption process. A POSITA would recognize that such modifications would render the original system inoperable or significantly alter its intended function, making the combination impractical and non-obvious. *Id.*, ¶239.

Even assuming a POSITA was motivated to make the proposed modification, there is no reasonable expectation of success. Candelore's decryption relies on a dedicated embedded IC that must interface with a smart card—something that cannot simply be transferred to Horn-Baumgartner's architecture without a complete redesign. Petitioner fails to provide any evidence that such an integration was feasible or even contemplated by a POSITA at the time of the invention. *Id.*, ¶240. Furthermore, Petitioner ignores the reality that Candelore's embedded IC cannot simply be abstractly combined with Horn-Baumgartner. The prior art does not teach

any method for making this integration work, nor does Petitioner provides any technical rationale for overcoming the clear incompatibilities. A POSITA would recognize that this is not an obvious combination but an impractical and speculative one. *Id.*, ¶241.

7. The Combination of Horn, Baumgartner, and Candelore Fails to Disclose Claims 18 and 24

Petitioner fails to show that Horn in combination with Baumgartner and Candelore discloses claims 18 and 24. Petitioner relies on Horn's disclosure of "information management tools that facilitate communication to generate, transmit and receive, archive, search, order, retrieve, and render objects, including information organization personalized for each individual user based on preferences selected by the user." Pet. at 43. However, this falls short of satisfying the specific requirements of claim 18 of the '815 Patent, which explicitly calls for the system to generate a video list—specifically, a recommendation list—based on user preferences determined through their selection of video information. EX2040, ¶243.

As discussed above in Section III, "generating a list of video information based on preferences of a user" refers to generating a **recommendation video list**. Horn, on the other hand, does not disclose generating a recommendation video list based on user preferences. EX2040, ¶245. Instead, Horn describes a system that merely organizes information for a user based on preferences they select, for

example, categorizing information for different view approaches. EX1005, 8:58-67. This categorization of information into collections is fundamentally different from a system that generates a recommendation video list based on user selections of video thumbnails. EX2040, ¶246. Horn's disclosure merely allows users to organize objects according to predetermined or user-defined groupings; it does not involve the dynamic generation of a recommendation list based on user behavior or thumbnail selections, as required by claims 18 and 24. *Id.*

In summary, Petitioner's reliance on Horn does not establish that the combination with Baumgartner and Candelore satisfies the limitations of claims 18 and 24. Hence, the cited disclosures fail to demonstrate the required functionality of generating a recommendation video list based on user selections of video thumbnails, as claimed in the '815 Patent.

B. Ground 7: Petitioner Fails To Establish That Claims 20, 26, and 27 are Rendered Obvious By Horn in View of Baumgartner, Candelore, and WinTV

Claims 20 depends from claim 16, and claims 26 and 27 depends from claim 21. As set forth above, the combination of Horn, Baumgartner, and Candelore fails to teach all of the limitations of claims 16 and 21. Additionally, Petitioner has not provided sufficient evidence to show that WinTV was publicly accessible. For these

reasons, Grounds 7, 8, and 10 fail to show with unpatentability by a preponderance of the evidence.

1. Petitioner Has Not Provided Sufficient Evidence that WinTV Was Publicly Accessible

Petitioner contends that WinTV was "published no later than September 14, 2003 on the Hauppauge.com website." Pet. at 15. Petitioner further contends that "[a] POSITA would have been familiar with Hauppauge WinTV products…[and] would therefore have known to look on the Hauppauge website for relevant information." *Id.* at 15-16. However, even assuming, *arguendo,* a POSITA would have been familiar with Hauppauge, Petitioner has not shown that the link provided to the manual was publicly accessible to POSITA before the critical date. EX2040, ¶98.

"[T]he burden is on the petitioner to identify with particularity evidence sufficient to establish a reasonable likelihood that the reference was publicly accessible before the critical date of the challenged patent, and therefore that there is a reasonable likelihood that it qualifies as a printed publication." *Hulu, LLC v. Sound View Innovations, LLC,* IPR2018-01039, Paper 29 at 16 (PTAB Dec. 20, 2019) (precedential). The determination of whether a document was publicly accessible "involves a case-by-case inquiry into the facts and circumstances surrounding the reference's disclosure to members of the public." *Medtronic, Inc. v.*

Barry, 891 F.3d 1368, 1380 (Fed. Cir. 2018). What constitutes a printed publication "must be determined in light of the technology employed." *Samsung Elecs. Co. v. Infobridge Pte. Ltd.*, 929 F.3d 1363, 1369 (Fed. Cir. 2019) (citing *In re Wyer*, 655 F.2d 221, 226 (CCPA 1981)). "[E]lectronic documents may be publicly accessible if they were indexed or catalogued, or if there were other tools for customary and meaningful research. *See SRI Int'l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1196 (Fed. Cir. 2008) (quoting *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006)). Public accessibility requires more than technical accessibility. *Id.* (citing *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 773 (Fed. Cir. 2018)). "[A] work is not publicly accessible if the only people who know how to find it are the ones who created it." *Id.* at 1372. Here, there are critical gaps in Petitioner's evidence attempting to show WinTV is prior art.

First, Petitioner fails to provide sufficient evidence that WinTV was actually offered for sale/sold in the U.S. EX1011, upon which Petitioner relies, is an unauthenticated Internet Archive web page accessed on March 28, 2024 purporting to show a screen capture from the Hauppauge web site from, according to Petitioner, November 10, 1999. Pet. at 6. Yet, Petitioner provides no Internet Archive affidavit to support this exhibit. Moreover, even taking the exhibit at face value, it provides no evidence that WinTV was offered for sale in the US by November 10, 1999.

Second, Petitioner has not provided sufficient evidence that the WinTV Installation and Reference Manual (EX1010) was publicly accessible to a POSITA prior the critical date. EX2040, ¶98.

It is undisputed that the link provided by Petitioner takes a user in 2024/2025 to the manual Petitioner uses as Exhibit 1010. However, Petitioner has provided no evidence to support its statement that "[a] POSITA would have been familiar with Hauppauge WinTV products…[and] would therefore have known to look on the Hauppauge website for relevant information." *Id.* at 6-7.

In fact, the evidence suggests the opposite and that EX1010 would have only been accessible by the ones who created it, and was not indexed in a customary or meaningful way. For example, Dr. Balakrishnan navigated within the Internet Archive to the Hauppauge web site around the time Petitioner contends the WinTV manual was available (in August or September 2003) (*see*, *e.g.*, EXS2022-2023). EX2040, ¶99. He explored some links present at the time within those web pages, for example:

Exhibit	**Link**
2027	https://web.archive.org/web/20031001191953/http://www.hauppauge. com:80/html/tech.htm
2028	https://web.archive.org/web/20031001185005/http://www.hauppauge.

	com:80/html/specs.htm
2029	https://web.archive.org/web/20031011045622/http://www.hauppauge.com:80/manuals/

With respect to the link at EX2029, Dr. Balakrishnan found that:

> it is the next higher level directory where one would expect the manuals to be accessible. However, as can be seen from Exhibit 2029, that access was denied:

> This leads me to conclude that the general public, or a POSITA at the time, did not have access to the various WinTV manuals, at least through the Hauppauge web site at the time. I could find no link to current or archived manuals. Even further exploring some of the links on the home page failed to provide accessibility to product manuals.

EX2040, ¶¶100-101.

In an attempt to gloss over this deficiency in the evidence, Petitioner cites to various patents (*e.g.*, EX1037-1038) and states "[t]hese products were also mentioned in patents that would have come to the attention of a POSITA looking for information on such products." Pet. at 7. However, these patents are not evidence of the public accessibility of the WinTV Manual Petitioner uses in the Petition.

EX2040, ¶102. The Petition never explains how the vague references to "WinTV" in these documents provides any evidence of the public accessibility of the manual. No connection is made between these documents and their relevance to the WinTV Manual—the reference—rather than simply vaguely referenced "WinTV products."

Whether a POSITA was looking for information on unnamed WinTV products is irrelevant to whether the WinTV Manual—as used in the Petition—was publicly accessible prior to December 2, 2004. EX2040, ¶103. Indeed, the Board has rejected similar efforts to establish public accessibility of a reference based on publication of another document. *See, e.g., Monolithic Power Sys., Inc. v. Volterra Semiconductor LLC*, IPR2020-01351, Paper 20 at 6-11 (PTAB March 4, 2021) (finding Petitioner had not established public accessibility of a reference based on publication of another document because the record lacked evidence "that would tend to indicate that the release of the Handbook submitted as Exhibit 1017 is the particular release to which Philips refers.")

There is no evidence that the WinTV manual (EX1010) was indexed or catalogued such that a POSITA would have had access to it in 2003. Rather, it appears that only Hauppauge employees would know where to access the manuals in 2003. EX2040, ¶104. Petitioner has failed to show by a preponderance of the evidence that the WinTV manual (EX1010) was publicly accessible prior to the

critical date. "[A] work is not publicly accessible if the only people who know how to find it are the ones who created it." *Samsung Elecs. Co.*, 929 F.3d at 1372.

2. No Motivation to Combine WinTV with Horn and Baumgartner

For Ground 7, Petitioner attempts to use the WinTV reference to fill in the various gaps of the teachings of Horn with regard to the dependent claims of the '815 Patent. *See generally* Pet. at 48-55. As set forth above, Petitioner has not met its burden in showing that WinTV was publicly accessible. Additionally, as set forth above, a POSITA would not have had the motivation to combine Horn and Baumgartner. Ground 7 fails for these additional reasons.

Additionally, Petitioner has not shown how a POSITA would have combined the teachings of WinTV with at least the teachings of Horn in addition to Baumgartner with any expectation of success. A POSITA wouldn't be motivated to combine Horn with WinTV because they are two different systems. EX2040, ¶251. The problem solved by Horn is unrelated to the technical solutions addressed by WinTV. Horn discloses a "truly **open computer system** having data structures, input interfaces, displays and operational systems that permits the organization of information, as data objects" and permit a "**faster archiving** , retrieval and viewing of the information." EX1005, 3:10-17 (emphasis added). Moreover, Horn proposes a computer data processing system that has a "**simple-to-use** data structure and

operating mechanism to link information together in a dynamic, memory-and-space-efficient manner." Ex. 1005, 3:19-22 (emphasis added). In contrast, WinTV discloses a "Plug and Play" device installed to receipt, playback and record video. EX1010, 3-4, 4-1. A POSITA would not be motivated to combine the TV tuner card from WinTV to Horn's simple-to-use computer file system, because Horn is directed to making "collections" based on keywords in documents, and is not directed to receiving, playing and recording of video. EX2040, ¶251.

Additionally, the Petitioner state that Baumgartner suggests including a television tuner card for decoding tv channels. Pet. at 54. However, Horn does not suggest or teach to incorporate a tv tuner card in its system. In particular, while a POSITA maybe motivated in modifying a set-top box system of Baumgartner with a TV tuner card, it does not follow that a POSITA would not motivated to include a TV tuner card in a "truly open system" with an MFS system as disclosed in Horn that is directed to collection of various documents.

Therefore, Petitioner failed to show unpatentability by a preponderance of the evidence for any claim in Grounds 7.

C. Ground 8: Petitioner Fails To Establish That Claims 16-27 are Rendered Obvious By Horn in View of Baumgartner, Candelore, WinTV, and Chao

As I described above, the combination of Horn, Baumgartner, WinTV, and Candelore fails to teach all of the limitations of claims 16-27. Additionally, Petitioner has not shown how a POSITA would have combined the teachings of Horn with at least the teachings of Baumgartner in addition to Candelore, WinTV, and Chao with any expectation of success. Again, Petitioner has not met its burden in showing that WinTV was publicly accessible and thus has not met its burden of showing WinTV is prior art. Ground 8 fails for this reason alone.

Additionally, Petitioner has provided only conclusory statements regarding the combination of these references and has failed to identify how each claim element will be mapped against these **five** references. EX2040, ¶255.

Moreover, Petitioner fails to state why a POSITA would be motivated to modify Horn to add thumbnails for folders of content data as disclosed in Chao. Horn discloses a **simple-to-use** data structure system that provides interfaces for organization of data objects in a memory-and-space-efficient manner. *See* EX1005, 3:10-22. Horn teaches away from adding further complexity to its system, because its goal is to organize and display data in a space efficient manner. Additionally,

Petitioners fail to state what thumbnails would be used from Chao to modify the folders in Horn. EX2040, ¶256.

In particular, Petitioner fails to disclose why a POSITA would be motivated to modify the operating system (OS) code of Horn computer to include the thumbnails features from Chao. Horn's system is already optimized for efficient data organization and display. Simply identifying that thumbnails exist in Chao is not sufficient motivation to modify Horn. Without a clear rationale for the combination, the Petitioner's argument relies on impermissible hindsight reconstruction. EX2040, ¶257.

Horn explicitly teaches away from additional complexity. A POSITA would recognize that modifying Horn to include Chao's thumbnails would undermine its core functionality by introducing processing overhead that conflicts with its space-efficient design. In particular, the modifications which contradict the intended function of the prior art (Horn) cannot be considered obvious. *Id.*, ¶258. Petitioner does not explain how a POSITA would access or modify Horn's OS code to integrate Chao's thumbnails. Chao provides no guidance on which specific lines of Horn's OS code would require modification, leaving a POSITA to engage in an uncertain and speculative process. Specifically, obviousness requires a reasonable expectation of success, which Petitioner has failed to establish. *Id.*, ¶259.

Furthermore, Petitioner ignores the fact that Horn's OS architecture is not compatible with Chao's thumbnail-based system. A POSITA would not simply extract Chao's thumbnail implementation and insert it into Horn without overcoming significant hardware and software integration challenges. Petitioner fails to address these challenges, making the proposed modification impractical and non-obvious. *Id.*, ¶260.

Therefore, Petitioner failed to show unpatentability by a preponderance of the evidence for any claim in Grounds 8.

D. Grounds 9-10 Fail Because Kaplan, Bryant, Wong, and Candelore Do Not Disclose Elements Claims 16 and 21 Either Alone Or In Combination

As with prior grounds, Petitioner relies on cursory analysis in an attempt to utilize Kaplan, Bryant, Wong, and Candelore to show Claims 16-27 are unpatentable. However, Petitioner fails to show Kaplan and Bryant, either alone or together, render the claims unpatentable. Additionally, Grounds 9 and 10 fail because Wong is not prior art, and Petitioner relies on Wong for all claims of Grounds 9 and 10. As set forth above, all limitations of Claims 16-27 are fully supported prior to the filing of Wong. Finally, because Claims 20, 26, and 27 all depend on Petitioner's faulty analysis with respect to Claims 16 and 21, Ground 10 fails for this additional reason.

1. Petitioner Does Not Adequately Articulate a Combination of Kaplan's, Bryant's, Wong's, and Candelore's Teachings

"It is Petitioner's burden to explain specifically how the references would be combined to produce the claimed invention." *Lowe's Home Centers, LLC v. Epistar Corp.*, IPR2018-00932, Paper 7 at 19 (PTAB Nov. 1, 2018) (citing *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016)). Indeed, this requirement is set out in the statutory text of 35 U.S.C. § 312(a)(3)—"the petition identifies, in writing and ***with particularity***, each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim." For each of the individual reasons herein, the Petition lacks this explanation and therefore Grounds 9 and 10 fail.

First, the Petition consistently recites what Kaplan, Bryant, Wong, and Candelore purportedly teach *individually* (*e.g.*, Pet. at 67-68) but fails to assert "what the combined teachings of those references would have suggested to those of ordinary skill in the art." *Willis Elec. Co., Ltd. v. Polygroup Macau Ltd.*, 777 Fed. Appx. 495, 501 (Fed. Cir. 2019) (citing *In re. Keller*, 642 F.2d 413, 425 (CCPA 1981)). But "the Board tends to reject a 'pick-and-choose' approach to the presentation of evidence." *Trend Micro Inc. v. Open Text Inc.*, IPR2023-00692, Paper 8 at 28 (PTAB Nov. 6, 2023) (denying institution where "Petitioner's case is lacking a clear roadmap of which reference it relies on to disclose which limitation").

Such approach is "challenging to follow and makes it difficult to piece together in order to understand Petitioner's proposed combination or modification." *Lyft, Inc. v. Quartz Auto Techs., LLC*, IPR2020-01450, Paper 7 at 17-20 (PTAB Mar. 4, 2021) (denying institution where petitioner "does not articulate adequately how it proposes to modify one of the references or to combine the two references' teachings").

While the features of a secondary reference need not be bodily incorporated into the structure of the primary reference, a "clear, evidence-supported account of the contemplated workings of the combination is a prerequisite to adequately explaining and supporting a conclusion that a relevant skilled artisan would have been motivated to make the combination and reasonably expect success in doing so" is required. *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017). Accordingly, Petitioner's non-specific approach to the Kaplan-Bryant-Wong-Candelore combination cannot meet its burden to establish unpatentability by a preponderance of the evidence.

The Petition is organized such that Petitioner attempts to address the combination of Kaplan, Bryant, Wong, and Candelore and alleged motivation to combine up front, Petition at 61-66, and then the Petition makes fleeting references of the purported combination within individual limitations. *See, e.g.*, Pet. at 76-79 (limitation 16[f]), 81-83 (limitation 16[h]). But neither the generic motivation to combine section nor the cursory mentions of a combination in a few limitations

meets Petitioner's burden to explain what the combined teachings of Kaplan, Bryant, Wong, and Candelore would have suggested to a POSITA. EX2040, ¶263.

Petitioner's general motivation-to-combine discussion makes only conclusory statements that a POSITA would have modified the teachings in Kaplan based on Bryant's digital camera and "usable-customizable metadata." Pet. at 62. However, these vague suggestions merely parrot portions of Kaplan and Bryant. EX2040, ¶263. For example, Petitioner alleges "a POSITA would have known how to modify any data structures and user interfaces to include additional metadata because modifying data structures and user interfaces was well within their skill, and they had already created those data structures and user interfaces to create the system of Kaplan in the first place." Pet. at 62-63. Such "conclusory statements alone" are "insufficient articulations of motivation to combine." *In re Nuvasive, Inc.*, 842 F.3d 1376, 1383 (Fed. Cir. 2016). Petitioner's motivations for adding Wong to the Kaplan-Bryant combination (Pet. at 63-65 discussing "multiple user profiles") and Candelore with Kaplan-Bryant-Wong (Pet. at 66 discussing "encrypted content") fair no better.

Further, Petitioner's limitation-specific analysis of the independent claim merely discusses the teachings of Kaplan, Bryant, Wong, and Candelore *individually* and does not provide an "account of the contemplated workings of the combination." *Personal Web Techs.*, 848 F.3d at 994. The table below includes, for each limitation

in claim 16, Petitioner's discussion of each reference and the purported combination[1]:

Claim Limitation	Petitioner's Asserted Reference
[16pre]	"To the extent the preamble is limiting, Kaplan discloses it." Pet. at 66.
[16a]	"This Kaplan-Bryant-Wong-Candelore combination renders this limitation obvious." Pet. at 67 (discussing Kaplan, Bryant, and Candelore individually without discussing the combination or Wong)
[16b]	"Kaplan-Bryant in combination with Wong renders obvious this limitation." Pet. at 69 (discussing Bryant and Wong individually without discussing the combination, Kaplan, or Candelore) "To the extent not disclosed by Kaplan-Bryant, Wong discloses…" Pet. at 70[2]
[16c]	"Kaplan-Bryant in combination with Wong renders this limitation obvious." Pet. at 73 (no mention of Kaplan, Bryant, or Candelore)

[1] The argument applies equally to Petitioner's analysis of Claim 21 because it simply refers back to the Claim 16 analysis.

[2] *See infra* for further explanation as to why this language has been rejected by the PTAB.

[16d]	"Kaplan-Bryant in combination with Wong renders this limitation obvious." Pet. at 73 (no mention of Kaplan, Bryant, or Candelore)
[16e]	"Kaplan-Bryant in combination with Wong renders this limitation obvious." Pet. at 74 (discussing Wong and Kaplan individually without discussing the combination, Bryant, or Candelore)
[16f]	"Kaplan-Bryant in combination with Wong renders this limitation obvious." Pet. at 76 (discussing Wong and Kaplan individually without discussing the combination, Bryant, or Candelore)
[16g]	"Kaplan-Bryant renders this limitation obvious." Pet. at 79 (discussing Kaplan and Wong individually without discussing the combination, Bryant, or Candelore)
[16h]	"Kaplan-Bryant renders this limitation obvious." Pet. at 81 (discussing Kaplan and Wong individually without discussing the combination, Bryant, or Candelore)
[16i]	"Kaplan renders this limitation obvious." Pet. at 84 (discussing Kaplan and no mention of the combination, Bryant, Wong, or Candelore)
[16j] and [16k]	"Kaplan and Bryant disclose and/or render obvious these limitations obvious." Pet. at 84 (no discussion of the combination, Wong, or Candelore) "To the extent that these limitations are not disclosed or obvious over Kaplan, they are disclosed or at least obvious over Bryant." Pet. at 87

[16l]	"Kaplan-Bryant renders this limitation obvious." Pet. at 90 (discussing Kaplan and no mention of the combination, Bryant, Wong, or Candelore)
[16m]	"Kaplan-Bryant-Wong in combination with Candelore renders this limitation obvious" Pet. at 92 (providing pincites without any analysis)

The Petition never stays true to one primary reference and secondary references in this combination. Rather, the Petition simply ignores one or more references in favor of others in some limitations and oftentimes alleges to discuss the "Kaplan-Bryant combination" or the "Kaplan-Bryant-Wong combination" while only relying on a single reference. Such approaches are insufficient to establish obviousness under Section 103. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) ("A patent composed of several elements is not proved obvious by merely demonstrating that each of its elements was, independently, known in the prior art.").

In some instances, Petitioner cites lengthy portions of a reference as support without any explanation as to what in those citations supports Petitioner's obviousness combination. As one example, for limitations 16[j] and 16[k], Petitioner cites paragraphs 89-106 (over three columns), and figures 9A-9C of Kaplan without explanation. Pet. at 89. "It is not the Board's job to cobble together assertions from different sections of a petition or citations of various exhibits in order to infer every possible permutation of a petitioner's arguments," but that is what the Petitioner asks

the Board and Patent Owner to do here. *Microsoft Corp. v. FG SRC, LLC*, 860 Fed. Appx. 708, 713 (Fed. Cir. 2021). The result of Petitioner's mix-and-match approach to combining Kaplan, Bryant, Wong, and Candelore along with the overly broad citations asks the Board and Patent Owner to interpret which elements from each reference a POSITA would choose to combine, which portions of each reference should be considered when, and what the combined teachings might suggest to a POSITA.

Second, the defective combination of Kaplan, Bryant, Wong, and Candelore is further exacerbated by Petitioner's inclusion of a third reference, Horn. For limitation 16[h], the Petition contends that "Kaplan-Bryant renders this limitation obvious." Pet. at 81. But then, without providing any motivation to combine references, the Petition bring in the teachings of Horn to replace text with graphical thumbnails. Pet. at 83. Such omission of a motivation to combine Horn with Kaplan and Bryant (let alone the combination of Kaplan, Bryant, Wong, and Candelore) is fatal to this combination. *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 449 (Fed. Cir. 2015) ("When asserting that a claimed invention would have been obvious, that party must demonstrate that a skilled artisan would have had reason to combine the teaching of the prior art references to achieve the claimed invention….") (internal quotes omitted).

Third, after contending that Kaplan and/or Bryant alone discloses limitations 16[b], 16[j], 16[k], Petition at 69, 85, the Petition then states that "***to the extent that*** these limitations are not disclosed or obvious over Kaplan, they are disclosed or at least obvious over Bryant." Pet. at 87; *see also* Pet. at 69 (similar language in 16[b]). However, the Petition is silent as to what circumstances Kaplan would not disclose these limitations. "There is, therefore, no indication in the Petition that [Kaplan] has any deficiencies related to th[ese] element[s]. It is thus, unclear why a person of ordinary skill would turn to [Bryant] for the teaching of an element that, according to Petitioner, is already taught by [Kaplan]." *See LG Elecs., Inc. v. Cellular Comm'ns Equip. LLC*, IPR2016-00197, Paper 7 at 8 (PTAB Apr. 29, 2016) (denying institution where the Petition uses "to the extent that" language in an alleged obviousness combination). For this additional reason, the Kaplan-Bryant-Wong-Candelore combination fails.

Therefore, Petitioner failed to show unpatentability by a preponderance of the evidence for any claim in Grounds 9-10.

2. The Combination of Kaplan, Bryant, Wong, and Candelore Fails to Disclose Limitation 16[a] and 21[a]

Petitioner argues that that Bryant discloses "**receiving, via a network, first video information wirelessly** from a device external to the information processing apparatus, the first video information being received including second video

information that is encrypted," as required by claim element 16[a] and 21[a] of the '815 Patent.

Bryant cites the hard drive 20 of the home computer 10 in the Figure 1 as the claimed recording medium. However, there is no description about the "**receiving, via a network, first video information wirelessly"** from an external device. EX2040, ¶267. Although, the home computer 10 includes a modem 22, Bryant does not disclose that the home computer 10 wirelessly receives video information by the network interface over a network from an external device. *Id.* Petitioner recognizes this deficiency in Kaplan-Bryant combination when it states that "[r]eceiving this video information wireless via a wireless modem at the Kaplan-Bryant PC would have been obvious to a POSITA for the reasons discussed above." Pet. at 68.

Therefore, Petitioner failed to show unpatentability by a preponderance of the evidence for any claim in Grounds 9-10.

3. The Combination of Kaplan, Bryant, Wong, and Candelore Fails to Disclose Limitation 16[b] and 21[b]

Petitioner fails to show that Kaplan in combination with Bryant and Wong discloses "displaying, on a display device, a first user interface for a user to **select a user profile from among a plurality of user profiles** including a first user profile associated with a first character and a second user profile associated with a second character" as required by claim elements 16[b] and 21[b].

In particular, Kaplan and Bryant falls short by failing to present a user interface that enables a user to select a profile from multiple user profiles. EX2040, ¶269. Petitioner attempts to bridge this gap by referencing features from Wong. However, as discussed above, Wong is not a prior art. Additionally, Petitioner provides no explanation to how a POSITA would incorporate the teachings of Wong in Bryant. *Id.*

Therefore, Petitioner failed to show unpatentability by a preponderance of the evidence for any claim in Ground 9-10.

4. The Combination of Kaplan, Bryant, Wong, and Candelore Fails to Disclose Limitation 16[e], 16[f], 16[g], 16[h], 21[e], 21[f], 21[g], and 21[h]

Petitioner fail to show that Kaplan in combination with Bryant discloses claim element 16[e] and 21[e]: "displaying, in response to the selection, a second user interface for a user to select desired video information to be reproduced from among the first video information."

Petitioner points to Kaplan's menu display in Figure 4 having a second user interface. Pet. at 77. However, Kaplan's menu display cannot be the second user interface as the Petitioner already selected it as a first user interface. In particular, the '815 Patent discloses the first and second user interfaces as two separate display screens. *See Supra* Section III. As discussed above, the claims, specification, and figures of the '815 Patent explicitly establish that the second interface is distinct

from the first interface and appears on a new screen. *See* EX1001 at 6:19-41 and Figures 4-7.

In particular, a POSITA, when reading claims 16 and 21 in their entirety, would understand that the second interface refers to a new screen separate from the first user interface. EX2040, ¶273. This new screen displays user-specific information, as further evidenced by the claims' requirement that the second interface includes a character identifying the user associated with the selected user profile. *Id.*

A POSITA would interpret this claim limitation to mean that the second interface must be a new screen because the characters identifying the user profile are already present in the first interface. EX2040, ¶274. The only logical purpose for requiring these identifying characters in the second interface is that it operates as a new screen distinct from the first, which does not carry over the information from the first interface. *Id.*

Even if we were to assume, *arguendo*, that Kaplan's menu display discloses the second interface—which it does not—the Kaplan-Bryant combination still fails to satisfy the claim limitation requiring "displaying, in response to the selection, a second user interface for a user to select desired video information to be reproduced from among the first video information," as specified in claim element 16[e]. Petitioner provides no explanation how "in response to selection" the second user

interface is displayed. *Id.*, ¶275. Petitioner does not disclose first and second interface and simply points to some blue or red areas on a menu display. Pet. 76.

Regarding the limitation "the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user of the first user profile" as required by claim element 16[f], Petitioner's arguments are fundamentally flawed. EX2040, ¶276. Petitioner merely points to folder names such as "Favorites" or "History" as examples of the first and second characters. This interpretation is nonsensical and unsupported by the claim language. The claim explicitly requires that the first and second characters are associated with user profiles and identify a user. Folder names like "Favorites" or "History" do not represent user profiles and cannot serve as identifiers for a user, as required by the claim. *Id.*, ¶277.

To address this clear deficiency, Petitioner attempts to rely on Wong. However, this argument fails. First, Wong is not prior art. Second, Petitioner fails to explain how Wong would be integrated into the Kaplan-Bryant system to satisfy the claim limitation. EX2040, ¶278. Petitioner provides no technical details or rationale for how the combination of Kaplan-Bryant and Wong would achieve the claimed functionality of associating characters with user profiles and using them to indicate a user's identity. *Id.*

In short, Petitioner's reliance on folder names as user identifiers is baseless, and its attempt to use Wong to fill these gaps is deficient. Petitioner fails to meet the burden of showing that the Kaplan-Bryant system, alone or in combination with Wong, discloses or renders obvious the limitation required by claim element 16[f].

5. The Combination of Kaplan, Bryant, Wong, and Candelore Fails to Disclose Limitation 16[i], 16[j], 16[k], 16[l], 21[i], 21[j], and 21[k]

Petitioner has failed to show that the combination of Kaplan and Bryant discloses claim elements 16[k] and 21[k] of the '815 Patent.[3]

Petitioner fails to show that Horn in combination with Baumgartner discloses claim element 16[i] and 21[i]: "the first group of video information and the second group of video information including one video information that is the same." As a threshold issue, Petitioner appears to misunderstand the limitations of claim 16. The claim explicitly requires that the first group of video information, associated with the first user profile (claim element 16[f]), and the second group of video information, associated with the second user profile (claim element 16[h]), include one video that is the same. However, Petitioner relies on Kaplan's Favorites and History folders rather than user profiles. Pet. at 40. Favorites and History folders, as disclosed by Horn, are not equivalent to user profiles as required by the claims.

[3] Petitioner provides absolutely no analysis for Claim element 21[j]. *See* Pet. at 96.

EX2040, ¶282.

For limitations 16[j], 16[k], and 21[k] Petitioner cites paragraphs 89-106 (over three columns), and figures 9A-9C of Kaplan without explanation. Pet. at 89. This is insufficient. *Microsoft Corp.*, 860 Fed. Appx. at 713. Specifically, Petitioner fails to establish that the combination of Horn and Baumgartner discloses claim element 16[k]. Instead, Petitioner relies on Kaplan's files pointers in "Favorites" and "History" folders for removal of content (Pet. at 85), but fails to explain how Kaplan's folders function across multiple user profiles.

Critically, Petitioner does not identify any disclosure in Kaplan and Bryant showing that removing a video from the first group (associated with the first profile) results in the video remaining in the second group (associated with the second profile). EX2040, ¶285. Furthermore, Petitioner provides no analysis of the final portion of element 16[k], which requires that "the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected." *Id.*

In sum, Petitioner's arguments are conclusory and unsupported. The combination of Kaplan, Bryant, Wong, and Candelore fails to satisfy the specific limitations of claim elements 16[i], 16[j], 16[k], 16[l], 21[i], 21[j], and 21[k], as required by the claims 16 and 21.

Additionally, Maxell is not estopped from arguing Petitioner's failure with respect to this element, as set forth below.

a. Collateral Estoppel Does Not Apply

Petitioner argues that collateral estoppel applies to limitation 16[k]:

> the doctrines of issue preclusion and collateral estoppel preclude Maxell from contesting that Bryan does not disclose, and the combination of Kaplan and Bryan do not render obvious [sic]. This is because the language of this limitation is nearly identical, and is substantively identical, to limitation 2.9 of the '783 patent, which was held by the Board in the 01432FWD to be taught by Bryant alone and by the combination of Kaplan and Bryant.

Pet. at 84. A party seeking to invoke collateral estoppel must show:

> (1) the issue is identical to one decided in the first action; (2) the issue was actually litigated in the first action; (3) resolution of the issue was essential to a final judgment in the final action; and (4) [the party against whom collateral estoppel is being asserted] had a full and fair opportunity to litigate the issue in the first action.

In re Freeman, 30 F.3d 1459, 1465 (Fed. Cir. 1994). Here, collateral estoppel does not apply at least because the issue was not actually litigated. In the FWD on which Petitioner bases this argument, the Board noted that "[b]ecause this *inter partes* review is based on a petition filed before November 13, 2018, we construe the claims by applying the broadest reasonable interpretation in light of the specification." Ex.

1009 at 9-10. In the FWD, the Board construed usage of the singular "one" in "one video information," which was part of limitation 2.9, and disagreed with Patent Owner's interpretation of that term under a broadest reasonable interpretation standard. *Id.* at 11-12. But in this proceeding, the standard of claim interpretation is different—it is the standard that is used in federal courts. 37 C.F.R. § 42.100(b).

The different claim construction standards applied by the Board in the FWD and the standard to be applied in this proceeding prevent any expansion of the collateral estoppel doctrine here because the claim construction issues have not actually been litigated. *Cf. Skyhawke Techs., LLC v. Deca Int'l Corp.*, 828 F.3d 1373, 1376 (Fed. Cir. 2016) ("Because the Board applies the broadest reasonable construction of the claims while the district courts apply a different standard of claim construction as explored in *Phillips*…, the issue of claim construction under *Phillips* to be determined by the district court has not been actually litigated."). As such, the Board should reject Petitioner's collateral estoppel argument.

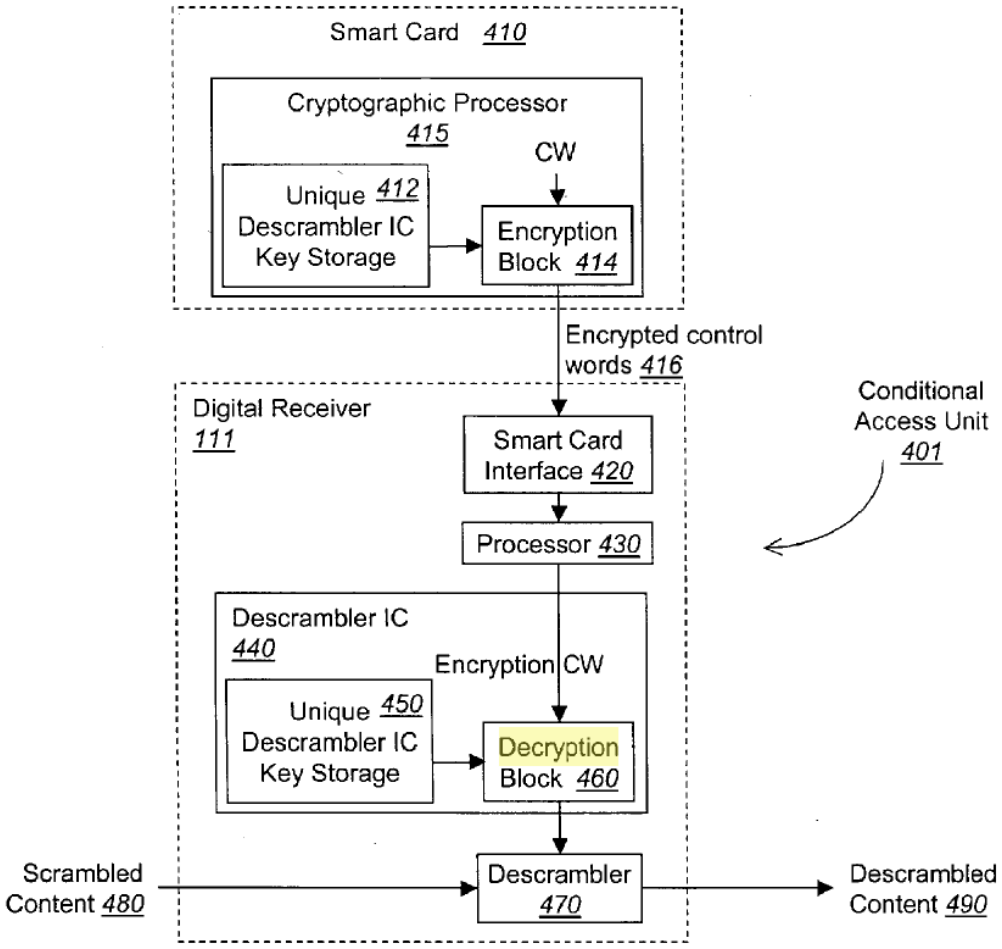
Additionally, the issues of patentability between the two proceedings are not identical. In attempting to show identical issues of patentability, Petitioner ignores the claim as a whole. For example, the language of claim elements 16[l] and 16[m] is not included in the '783 Patent. While there is some language in the respective claims that is similar, a comparison of the claim language between the two patents show that, when considered as a whole, the issues of patentability are not identical

when considering the claim language as a whole. *Compare* EX2009, Claim 2 *with* EX1001, at Claim 16.

As such, Maxell is not estopped from arguing that Petitioner has failed to meet its burden of showing Bryant and Kaplan render claim 16 unpatentable with respect to claim element 16[k]/21[k].

6. The Combination of Kaplan, Bryant, Wong, and Candelore Fails to Disclose Limitation 16[m], 21[l], and 21[m]

Petitioner fails to show that Kaplan in combination with Bryant, Wong, and Candelore discloses claim element 16[m] and 21[l]. In particular, Kaplan and Bryant disclosures fall short by failing to provide decryption of video information and displaying the decrypted video. EX2040, ¶289. The Petitioner attempts to bridge this gap by referencing features from Candelore. However, Candelore discloses a very specific hardware to decrypt the video content in a set-top box that a POSITA would not have found obvious to include in the Kaplan-Bryant system as Petitioner suggests:



EX1013, Fig. 2.

A POSITA would not have a reasonable expectation of success in the combination because decryption in Candelore is performed by an "embedded" IC—an embedded IC that is required to co-work with a "smart card" to perform the decryption—that a POSITA simply cannot pick and put in another system. EX2040, ¶290. Petitioner Specifically, Kaplan-Bryant does not suggest any benefit to such a combination, and without a clear teaching or motivation, Petitioner's argument is based purely on hindsight.

Petitioner's proposed combination would require modifying Kaplan-Bryant's architecture in a way that is fundamentally incompatible with Candelore's embedded IC decryption process. A POSITA would recognize that such modifications would render the original system inoperable or significantly alter its intended function, making the combination impractical and non-obvious. EX2040, ¶291.

Even were a POSITA motivated to make the proposed modification, there would be no reasonable expectation of success. *Id.*, ¶292. Candelore's decryption relies on a dedicated embedded IC that must interface with a smart card—something that cannot simply be transferred to Horn-Baumgartner's architecture without a complete redesign. Petitioner fails to provide any evidence that such an integration was feasible or even contemplated by a POSITA at the time of the invention. *Id.*

Furthermore, Petitioner ignores the reality that Candelore's embedded IC cannot simply be abstractly combined with Horn-Baumgartner. The prior art does not teach any method for making this integration work, nor does Petitioner provides any technical rationale for overcoming the clear incompatibilities. A POSITA would recognize that this is not an obvious combination but an impractical and speculative one. *Id.*, ¶¶293-294.

7. The Combination of Kaplan, Bryant, Wong, and Candelore Fails to Disclose Claims 18 and 24

Petitioner fails to show that Kaplan in combination with Bryant, Wong, and

Candelore discloses claims 18 and 24. Petitioner relies on Kaplan's disclosure of "History" group. Pet. at 92. However, this falls short of satisfying the specific requirements of claim 18 of the '815 Patent, which explicitly calls for the system to generate a video list—specifically, a recommendation list—based on user preferences determined through their selection of video information. EX2040, ¶296.

As discussed above, "generating a list of video information based on preferences of a user" refers to generating a **recommendation video list**. Kaplan, on the other hand, does not disclose generating a recommendation video list based on user preferences. *Id.*, ¶298. Instead, Horn describes a system that merely organizes information for a user based on prior access of those object by the user. Pet. at 92.

This categorization of information into a history list is fundamentally different from a system that generates a recommendation video list based on user selections of video thumbnails. EX2040, ¶299. Horn's disclosure merely allows users to organize objects according to prior access grouping; it does not involve the dynamic generation of a recommendation list based on user behavior or thumbnail selections, as required by claims 18 and 24. *Id.*, ¶¶299-300.

For the reasons expressed above, Petitioner has failed to show that any of Grounds 6-10 render claims 16-27 unpatentable by a preponderance of the evidence.

V. CONCLUSION

For at least the foregoing reasons, the Board should confirm the patentability of the challenged claims.

Dated: January 31, 2025

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CERTIFICATE OF SERVICE

I hereby certify that on this 31st day of January, 2025, a copy of the attached PATENT OWNER RESPONSE TO PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 11,017,815, together with all exhibits was served by electronic mail to the attorneys of record, at the following addresses:

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Respectfully submitted,

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CERTIFICATION PURSUANT TO 37 C.F.R. § 42.24(d)

Pursuant 37 CFR 42.24(d), the undersigned certifies that this Patent Owner's Response complies with the type-volume limitation of 37 CFR §42.24(a). The word count application of the word processing program used to prepare this Patent Owner's Response indicates that the Response contains 13,990 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

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