

**IN THE 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 OWNER'S SUR-REPLY

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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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
U.S. Patent No. 7,512,622	2013
U.S. Patent No. 6,480,669	2014
U.S. Patent No. 7,974,511	2015
U.S. Patent No. 7,853,893	2016
Petitioner's invalidity contentions chart in District Court—Kaplan	2017
Petitioner's invalidity contentions chart in District Court—Bryant	2018
Translation of JP 4385943B2	2019
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-andwireless-networking-in-your-home	2025
The Benefits of Wireless Technologies (https://librarytechnology.org/document/9643)	2026

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
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User's Guide for Windows NT	2039
Declaration of Ravin Balakrishnan, Ph.D.	2040

I. INTRODUCTION

The arguments in Petitioner's reply should be rejected for the reasons discussed below.

II. CLAIM CONSTRUCTION

A. "Second User Interface" (Claims 16, 21)

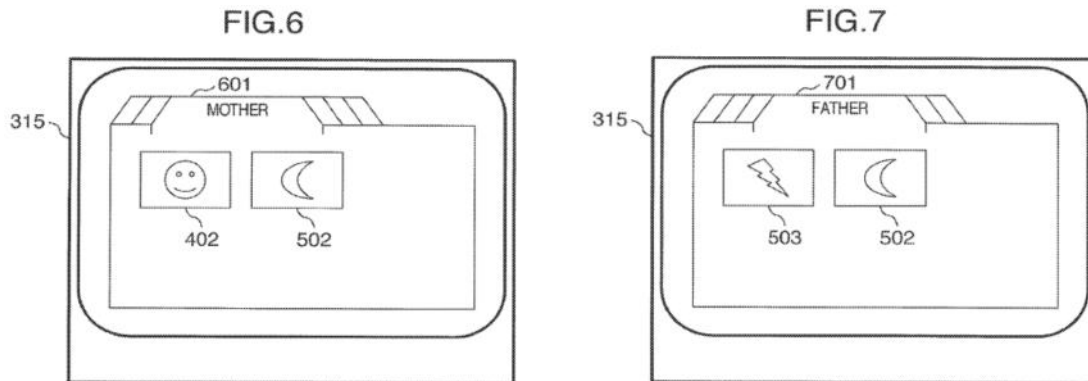
As set forth in the POR, the "second user interface" term should be construed as follows:

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

Petitioner's assertion that the claims permit the first and second user interfaces to appear on the same screen misconstrues both the intrinsic evidence and the testimony of Dr. Balakrishnan. Contrary to Petitioner's selective characterizations, the '815 Patent consistently distinguishes the first and second user interfaces as separate and sequential—both in structure and in function.

The claims, specification, and figures establish that the "second user interface" appears only in response to the selection of a user profile and is dedicated to that user. Figures 5–7 depict distinct user-specific interfaces—each associated

with a unique folder (e.g., “mother” or “father”)—and containing user-defined data such as playlists and program thumbnails. POR, 14-17; EX2040, ¶¶42-42. This structural/functional transformation reflects the display of a new screen distinct from the initial, profile-selection interface. EX1001, 6:19–41, Figs. 4–7.



Petitioner attempts to undermine this interpretation by citing deposition testimony in which Dr. Balakrishnan acknowledged that both interfaces could theoretically occupy the same “physical screen.” Reply, 1. However, this testimony does not contradict his expert opinion or the position in the POR. Instead, it merely reflects that a single physical display can render multiple logical interfaces in sequence or even in overlapping areas—a well-understood concept in user interface design. EX1072, 91:7–96:12 The key distinction remains: the second user interface is a new, user-dedicated screen that appears in response to the selection of the user profile and is functionally and contextually distinct from the initial (first) user interface. *See id*; *see also* 98:9-20.

Finally, Petitioner's reading—where the “second user interface” could be a subset or overlay of the first—renders the term “second” superfluous and undermines the claim's structure. The use of “second” denotes a distinction from the first, and the claims further reinforce this by requiring the second interface to include a character identifying the selected user (EX1001, Claims 16, 21), which serves no logical purpose if the interface merely overlaps or reuses the first.

Patent Owner's construction—that the second user interface is a new user-dedicated screen—is consistent with the claim language, the specification, and the understanding of a POSITA. EX2040, ¶¶42-43.

III. CLAIMS 16-19 AND 21-25 ARE PATENTABLE OVER HORN, BAUMGARTNER, AND CANDELORE

A. No Motivation to Combine

Petitioner's reply fails to cure the evidentiary and analytical defects in its initial assertion that a POSITA would have been motivated to combine Horn and Baumgartner.

1. The Two Systems Address Fundamentally Different Problems

Petitioner downplays the substantial differences between Horn and Baumgartner by citing a single paragraph from Baumgartner (¶82) that generically states the system “may be implemented on a personal computer.” Reply, 3. This isolated statement does not overcome the fundamental distinction between the file organization and data management focus of Horn and the interactive video-on-

demand set-top box environment of Baumgartner. The purposes and architectures of these systems diverge significantly. POR, 20-21; EX2040, ¶191.

Horn is explicitly directed to organizing and indexing diverse data types in a structured and efficient manner, for purposes such as faster retrieval and dynamic data linking. EX1005, 3:10–22. Dr. Balakrishnan confirmed that Horn describes “a server architecture doing automatic organization, indexing, and retrieval of data from multiple sources.” *See* EX1072, 24:13–25:4. In contrast, Baumgartner deals with delivering user-selected video content via profiles and set-top boxes—an application-specific, media delivery solution, not a general-purpose data management platform. Petitioner's reference to multimedia in Horn (EX1005, 12:8–18) is too broad to establish a meaningful connection to Baumgartner's system; Horn makes no mention of content delivery or user-profile-based video selection akin to Baumgartner.

2. Petitioner's Arguments on Wireless LAN are Conclusory and Unsupported

Petitioner's reply merely reiterates its original position that a POSITA would prefer wireless LANs over wired LANs due to cost and convenience, citing anecdotal prices and general “common sense.” Reply, 5. This view ignores the actual technological context of Horn's system and the state of networking technology in 2004. POR, 21-23; EX2040, ¶192.

While Petitioner emphasizes the cost of running wires, it fails to grapple with the clear technical drawbacks of wireless LANs at the time—lower bandwidth, higher latency, and greater security vulnerabilities. Dr. Bederson conceded that “faster communication speeds probably would help” achieve Horn’s goal of faster archiving and retrieval (EX2038, 51:22–52:8), supporting the conclusion that a wired LAN is better suited for Horn’s system. Petitioner also ignores the cost data showing wireless solutions were not meaningfully cheaper than wired options at the time (EX2024–2025; EX2040 ¶192).

Nor do the Gateway advertisements (EXS1070-1071) establish wireless LANs were viable substitutes in the high-throughput, enterprise-level computing context relevant to Horn. In particular, Petitioner’s reliance on a 2004 email from Dr. Bederson (EX1070), is both misplaced and improper. The email is hearsay, lacks any technical analysis, and offers no reliable evidence of the suitability of wireless networks for Horn’s disclosed architecture.

3. Petitioner Mischaracterizes Horn to Fit Its Narrative

Petitioner’s assertion that Horn merely runs on a laptop or general-purpose PC (Reply, 9) ignores the broader system context that a POSITA would have appreciated. The presence of a laptop in Figure 1 does not negate the server-based design and functionality of Horn’s MFS, which is described as robust, scalable, and intended for data aggregation, indexing, and retrieval across networked

environments. EX1005, 3:10–17, 6:59–63.

Dr. Balakrishnan's characterization of Horn as a server-based system is rooted in this disclosure and reflects the realities of high-performance data management in the early 2000s. EX2040, ¶195. Petitioner criticizes the use of terms like “enterprise-level” and “scalable” (Reply, 7), but fails to address the technical limitations of wireless LANs in server environments, including risk of packet loss, interference, and unstable throughput—all of which undermine Horn's goals of fast and secure data access. EX2040, ¶132.

The fact that MFS could run on multiple operating systems, including those used on personal computers, does not mean the intended use case was a low-complexity, single-user environment. EX2040, ¶195. The ability to run on diverse platforms reflects software portability—not suitability for replacing wired, high-performance networks with wireless alternatives. *See id.*

4. Petitioner Ignores the Security Imperatives of Horn's System

Petitioner's reply entirely fails to rebut the security-based motivation against adopting wireless LANs in Horn's system. As discussed in the POR (at 25–26), Horn explicitly discloses that its system stores user data and hosts internet pages (EX1005, 5:47–60), raising critical concerns about data integrity and unauthorized access. Dr. Bederson acknowledges that a POSITA in 2004 would be aware of such security risks (EX2038, 52:9–53:4). Petitioner does not cite any disclosures in Horn or

Baumgartner suggesting that less-secure wireless networks would be appropriate for this type of system. EX2040, ¶135. Petitioner's reply fails to offer a credible, technically grounded reason why a POSITA would have been motivated to combine Horn and Baumgartner.

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

Petitioner acknowledges that Horn does not expressly disclose receiving video wirelessly (Reply, 11)—indeed, it does not disclose receiving video at all. EX2040, ¶210. Horn's system focuses on organizing files, music, and images (EX1005, 12:5–7), not on handling streaming or downloaded video content. While Petitioner now points to a generic mention of “movies” in Horn (EX1005, 12:13), this isolated term does not equate to a disclosure of receiving encrypted video content wirelessly from an external device, as the claims require. Petitioner offers no evidence that Horn handles such transmissions—wireless or otherwise—and the reference's consistent emphasis on space-efficient data organization undermines any suggestion that high-bandwidth video data was contemplated. *See* EX2040, ¶210.

Petitioner's reliance on *In re Merck*, 800 F.2d 1091 (Fed. Cir. 1986) is misplaced. Reply, 11. The principle that references should be considered in combination does not absolve Petitioner from articulating a reasoned rationale for why a POSITA would have made the claimed combination with a reasonable

expectation of success. Here, Petitioner offers no credible reason why a POSITA would integrate Baumgartner's wireless video delivery system into Horn's file-based organizational framework—a framework not even configured for video transmission. The conclusory assertion that combining the two would be “obvious” because of general LAN substitutability ignores the technical, functional, and architectural incompatibilities between the systems. *See* EX2040, ¶¶191–192, 209–211.

Moreover, Petitioner's reply again leans on the wireless LAN cost argument, which fails for the reasons already addressed above. *See* Reply, 12. Petitioner does not meaningfully contest that in the early 2000s, wireless networking equipment was more expensive and less secure, with substantially lower throughput compared to wired LANs (EX2024–2026; EX2040, ¶202). Petitioner's citation to consumer hardware pricing does not demonstrate that a POSITA designing a secure, high-performance enterprise system would have adopted wireless communication—let alone for encrypted video transmission from an external device.

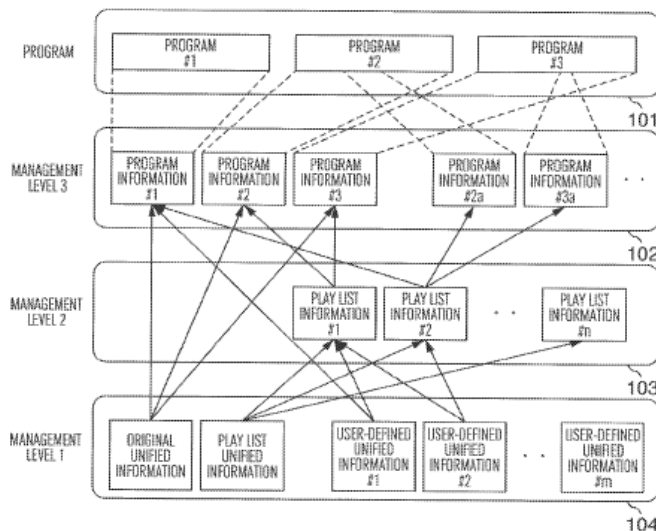
Thus, Petitioner has not shown, by a preponderance of the evidence, that the asserted combination discloses limitations 16[a] and 21[a].

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

Petitioner's argument hinges on two assertions—(1) that Horn's disclosure of "personalized collections" qualifies as a user profile under the Board's construction, and (2) that Baumgartner's profile selection buttons could have been implemented in Horn's GUI. Neither assertion withstands scrutiny.

First, Horn does not disclose a user-selectable interface for choosing among multiple user profiles, each associated with a distinct character or identity. While Horn references collections such as "Family, Friends, Work, To Do" (EX1005, 8:58–67), these categories are not selectable profiles, but rather pre-defined organizational groupings. Petitioner's reliance on general statements about "personalization" and "organizing by person" (EX1005, 6:11–22, 37:66–38:3) is misplaced. These disclosures pertain to how data may be organized within a user's workspace, not how a user selects between multiple user profiles at an interface. This is in stark contrast to the claims and specification of the '815 Patent. For example, in Fig. 1 the claimed GUI feature relating to the user profile is based on that "User Defined Unified Information" is assigned to the dedicated management layer, *e.g.*, LEVEL 1:

FIG.1



The record lacks any evidence that Horn provides a GUI with buttons, avatars, or identifiers enabling such profile selection. *See* EX2040, ¶215.

Second, Petitioner's fallback to Baumgartner does not fill the gap. While Baumgartner includes buttons for user selection (*e.g.*, EX1016, ¶¶165, 172), Petitioner concedes that it does not “provide additional details on how to implement such user profile buttons.” Pet., 32. Petitioner now attempts to cure that deficiency by citing GUI elements labeled 296–386 in Baumgartner's Figs. 24–27—but fails to explain how or why a POSITA would transfer those elements into Horn's Workspace. Moreover, the button reference in ¶165 of Baumgartner functions as unlocking access restrictions to the user profile, similar to a pin input. Thus, even if Baumgartner's disclosure is combined with Horn, it does not disclose the “first user interface.”

As Dr. Balakrishnan explains (EX2040, ¶¶214–215), such a modification would not have been obvious to a POSITA given the functional structure and intended use of Horn's interface. Horn's panes are not designed to present or manage user profiles, and there is no discussion of assigning users to collections or linking characters to profiles as required by the claims.

In short, Petitioner's arguments reflect impermissible hindsight—relying on knowledge of the claims to retrofit unrelated features from disparate systems.

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

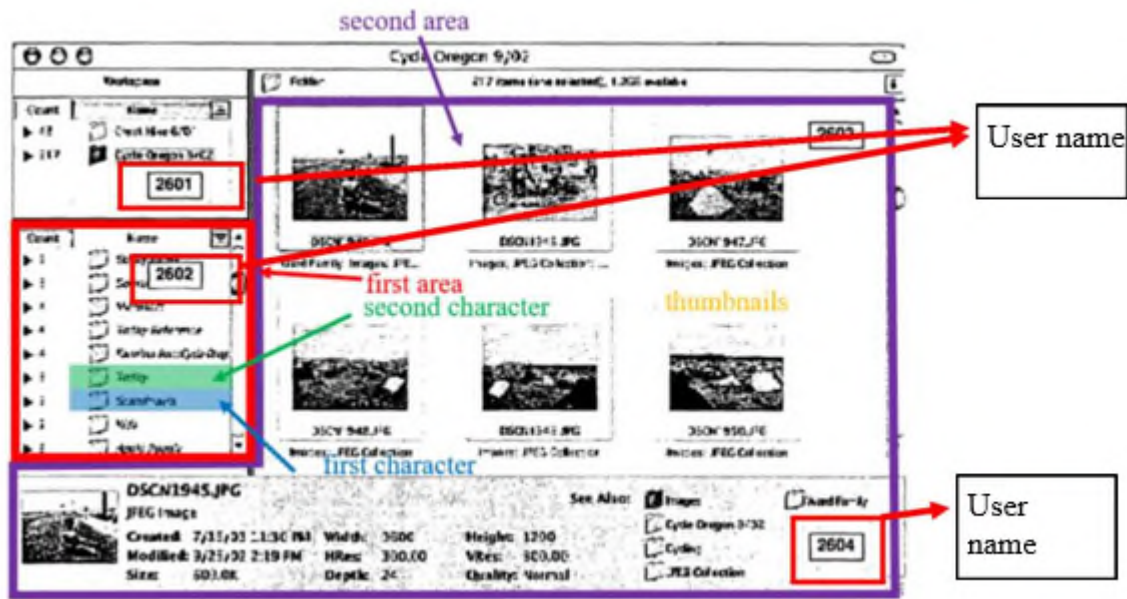
Petitioner's argument rests on a legally and factually flawed premise—that the second user interface need not be distinct from the first. However, as explained in the POR and supported by the intrinsic record (EX1001, 6:19–41, Figs. 4–7), the second user interface must be a new screen presented in response to user profile selection. *See also* EX2040, ¶¶218–220.

Even under Petitioner's theory, the proposed combination fails to meet this limitation. Horn's Workspace view—specifically, pane 2603—does not display video information in response to profile selection. EX2040, ¶222. Rather, as Horn plainly states, pane 2603 displays content “associated with the selected item” in panes 2601 or 2602. EX1005, 19:41–57; EX2040, ¶223. The “profile button” has the function of unlocking access restrictions to the user profile, thus it is not possible

for such a button to be added to pane 2601/2602. Further, even if profile buttons were added to panes 2601/2602, selecting a profile would only update the folder view, not trigger a new screen or display of video information as required by the claims. A further user action—selecting a folder—is necessary to populate pane 2603. Petitioner's suggestion that pane 2603 content automatically appears based on profile selection is unsupported and contrary to Horn's actual disclosure.

In addition, Petitioner concedes that Horn does not disclose a user-identifying character in the second user interface, but asserts that it would have been obvious to add the username to metadata pane 2604. Reply, 24. This reasoning is flawed.

First, Petitioner has already proposed displaying the username in panes 2601/2602, which it identifies as part of the first interface. Pet., 32. A POSITA would not redundantly display the same username in both the first and second interfaces on a single screen, as this contradicts the claim's structure, which clearly distinguishes between the two interfaces and the content associated with each. See EX2040 ¶225.



EX1005 at Fig. 26.

Second, Petitioner's argument assumes without support that displaying the same identifying character across multiple panes of the same interface would be obvious and beneficial. But the '815 Patent teaches a context-sensitive display of user-identifying information—with the first character appearing in the second interface specifically to denote a change in user context. Replicating that character across the same screen, without a transition or interface change, defeats the very function of that identifier and would not reflect a natural or intuitive design choice for a POSITA. See EX2040, ¶225.

Petitioner similarly fails to show that the combination satisfies claim limitations. As explained in the POR (34–35), Horn's interface does not display thumbnails corresponding to second user video content upon selection of a second

character. Rather, any content displayed in pane 2603 depends on the selection of a folder, not a character or profile. EX2040, ¶226. Petitioner fails to point to any portion of Horn or Baumgartner demonstrating that the selection of a character (*i.e.*, the identifier of the user profile) results in the automatic display of thumbnails. Instead, Petitioner relies on an unsupported inference that a POSITA would modify Horn's system to bypass its existing two-step logic. Such reasoning is hindsight-driven and impermissibly speculative.

Petitioner has failed to show unpatentability by a preponderance of the evidence with respect to Limitations 16[e], 21[e], 16[f], 21[f], 16[h], and 21[h].

E. 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's reply continues to rely on speculative mappings and conclusory reasoning to satisfy the multi-layered user-profile-based video management requirements of limitations 16[i]–[l] and 21[i]–[k]. Reply, 16–17. These claim elements require not only the existence of shared content across distinct user profiles but also specific behavior upon removal of that content from one group while retaining it in another, with corresponding thumbnail behavior. The asserted combination does not disclose or suggest these features.

Petitioner's argument rests on an assumption of equivalence between "collections" and "user profiles." Reply, 16–17. While Horn allows an item (*e.g.*, a

video or file) to belong to multiple collections (EX1005, 9:1–16; 20:16–46), this is not the same as disclosing that different user profiles each have associated groups of video information that can share content. Horn's collections are groupings based on metadata or user-defined criteria, not profile-specific groupings. See EX1005, 4:1–5; EX2040, ¶¶229–230.

Petitioner attempts to bridge this gap by asserting that it would have been “obvious” to associate collections with user profiles. Reply, 17. However, the cited disclosures (*e.g.*, Pet., 36–37) merely reflect profile-based personalization generally—not the specific architecture of user-specific groups of video information required by the claims.

Even assuming, *arguendo*, that Horn's collections were user-profile-specific (which they are not), Petitioner fails to show that removing a video from one group (associated with one user profile) results in the video continuing to be included in another profile's group.

Petitioner's reliance on Horn's teaching that “items may be removed from a collection without being deleted from the file system or other collections” (EX1005, 20:16–46) is incomplete and inapposite. That disclosure simply states that removal from one collection does not delete the file from disk or from other collections generally. It does not establish that content removed from one profile-linked group remains accessible within another profile's group, as required by the claims. See

EX2040, ¶¶231–232.

Notably, Petitioner's reply is silent on the final clause of limitation 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." *See* Reply, 16–17. This is a critical, visual confirmation requirement, ensuring that a user (*e.g.*, a second user) still sees the thumbnail even after another user removes that content from their own group. EX2040, ¶¶231–232.

Petitioner cites no disclosure in Horn or Baumgartner suggesting that thumbnail displays across profiles behave in this manner. There is no showing that a thumbnail display updates dynamically and independently based on user-specific group modifications. Petitioner's omission of this analysis reflects a fundamental failure to meet the claim language. *See* EX2040, ¶233.

Petitioner's reply fails to demonstrate that the combination of Horn, Baumgartner, and Candelore teaches or suggests the claimed profile-based video grouping, removal, persistence, and thumbnail display behaviors of limitations 16[i]–[l] and 21[i]–[k].

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

The claims require decrypting video information corresponding to a selected thumbnail and displaying the decrypted content (16[m], 21[l], 21[m]). Petitioner

relies exclusively on Candelore for these functions. However, Candelore's decryption system is highly specialized, relying on an embedded IC that interacts with a smart card reader. See EX1013, Fig. 2. This architecture is tied to the set-top box environment of Candelore and cannot simply be transplanted into the Horn-Baumgartner architecture without substantial redesign. EX2040, ¶240.

Even if a POSITA were motivated to add decryption functionality to Horn-Baumgartner, Petitioner fails to articulate why Candelore's embedded IC and smart card-based system would be the solution. Horn and Baumgartner operate in a general-purpose computing and content management environment—not a secured set-top box designed for encrypted conditional access television. Candelore's decryption is deeply integrated with its hardware (EX2040, ¶238), and Petitioner provides no rationale for importing that hardware into an entirely different system.

Petitioner has failed to show that the combination of Horn, Baumgartner, and Candelore satisfies the decryption and display requirements of limitations 16[m], 21[l], and 21[m].

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

Petitioner asserts that claims 18 and 24 are not limited to a “recommendation list,” but this misrepresents the claims and their context. The phrase “generating a list of video information based on preferences of a user” refers to the dynamic

generation of a list—such as a recommendation list—based on actual user behavior, such as prior selections of video thumbnails. POR, 41; EX2040, ¶¶243-246.

Horn does not teach this. *Id.* Horn allows a user to manually organize content into collections or to view information through different lenses based on preselected metadata (EX1005, 8:58–67), but it does not disclose any system that dynamically generates a new list of video information based on a user's selections. *Id.*, ¶246. Categorization based on metadata is fundamentally distinct from a behavioral recommendation engine.

Petitioner has therefore not met its burden of showing unpatentability of claims 18 and 24 by a preponderance of the evidence.

IV. CLAIMS 20, 26, AND 27 ARE PATENTABLE OVER HORN IN VIEW OF BAUMGARTNER, CANDELORE, AND WINTV

A. Petitioner Has Not Provided Sufficient Evidence that WinTV was Publicly Accessible

Petitioner's reply does not cure the evidentiary deficiencies identified in the POR and fails to demonstrate that the WinTV Installation and Reference Manual (EX1010) qualifies as a printed publication under prevailing Federal Circuit and PTAB precedent. The record lacks sufficient evidence that the manual was accessible to a POSITA as of the critical date.

Petitioner now attempts to rehabilitate its faulty petition and relies on the deposition testimony of Dr. Balakrishnan, claiming that he was able to navigate to

the WinTV manual from an archived version of the Hauppauge website “in just three clicks.” However, Petitioner overlooks the fact that this navigation was conducted in 2025 using the Internet Archive, not in real-time from the actual live website as it existed in 2003. The reconstruction of a path using modern archival tools does not equate to public accessibility at the time. *See Samsung Elecs. v. Infobridge*, 929 F.3d 1363, 1370–72 (Fed. Cir. 2019).

More importantly, the links and exhibits cited during Dr. Balakrishnan's deposition differ from the evidence presented in the Petition.¹ Even considering the “supplemental information” Petitioner seeks to introduce, Petitioner still fails to show WinTV was publicly accessible at the relevant time. As set forth in his declaration, Dr. Balakrishnan attempted to access the WinTV Manual (Ex1010) via the information *provided in the Petition*. EX2040, ¶¶96-104. He was unable to do so. Not until Dr. Balakrishnan's deposition, utilizing Petitioner's curated “bookmarks” provided on counsel's laptop, was Dr. Balakrishnan able to navigate through allegedly archived Hauppauge web pages. EX1072, 53:18-68:3. Yet, even then when asked to read the URL into the record, Dr. Balakrishnan found a difference between the evidence in the Petition and the newly-navigated web page.

¹ Petitioner moved to include supplemental information relating to WinTV (Paper 16) and Patent Owner opposed (Paper 17). The Board has not yet ruled on the motion.

Id., 67:3-15. Notably, Dr. Balakrishnan's testimony regarding his inability to access WinTV based on the evidence *presented in the Petition* remains unrebutted.

It is Petitioner's burden to clearly and consistently present its evidence in the Petition. The Board should disregard these new materials, which are improper and untimely. Public accessibility is evaluated based on whether a POSITA could have located the document using tools available and customary at the time, not via hindsight navigation. *See Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1380 (Fed. Cir. 2018). As Dr. Balakrishnan explained in his declaration (EX2040 ¶¶99–101), he explored the archived Hauppauge site as it existed in August–September 2003 using the links *provided in the Petition* and could not locate any functional links to the manual.

B. No Motivation to Combine WinTV with Horn and Baumgartner

Petitioner's reply does not overcome the fundamental deficiencies identified in the POR. The combination proposed in Ground 7—Horn, Baumgartner, and WinTV—remains unsupported by the record. Petitioner has failed to establish (1) that WinTV is prior art, (2) that a POSITA would be motivated to combine these three disparate systems, and (3) that there would be a reasonable expectation of success in doing so.

As detailed in the POR (43–48) and reiterated above, Petitioner has shown that the WinTV manual (EX1010) was publicly accessible prior to the critical date.

Without that showing, all dependent claim arguments relying on WinTV fail. *See Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 16 (PTAB Dec. 20, 2019) (precedential); *Samsung Elecs.*, 929 F.3d at 1370–72.

Petitioner's assertion that Horn supports video playback and therefore naturally integrates with WinTV is factually incorrect and unsupported by the record. Horn's references to "movies" are in the context of file types that may be stored and indexed (EX1005, 12:13), not content the system is configured to receive, decode, or render from external sources like a TV tuner.

Horn's architecture is centered around metadata-based document organization, optimized for efficient indexing, search, and retrieval in an "open computer system." *See* EX1005, 3:10–22; EX2040, ¶251. A POSITA would recognize that Horn's data structure is designed to manage digital files already present within the system—not to interface with hardware such as TV tuner cards for real-time broadcast reception or analog video decoding. *See* EX2040, ¶251.

Unlike Baumgartner's set-top box, Horn does not contemplate real-time video input, analog signal decoding, or broadcast channel management—all central to WinTV. Petitioner fails to explain how or why a POSITA would retrofit Horn's metadata architecture to accommodate hardware-based media decoding. *See* EX2040, ¶251.

Even if a POSITA were motivated to combine these systems, Petitioner offers no analysis supporting a reasonable expectation of success. The references offer no disclosure—nor does Petitioner supply any evidence—of how to integrate the WinTV PCI hardware (requiring driver-level integration and video pipelines) into Horn's file-based operating mechanism. See EX2040, ¶251.

Petitioner's reply instead falls back on generalizations about video playback and personalization, which are insufficient under Federal Circuit law. *See In re NuVasive*, 842 F.3d 1376, 1383 (Fed. Cir. 2016) (“conclusory statements alone are insufficient to demonstrate a motivation to combine”).

Petitioner has failed to show that WinTV is prior art, has not provided a credible motivation for combining it with Horn and Baumgartner, and has not demonstrated a reasonable expectation of success in doing so. The three systems operate with different purposes, architectures, and technical assumptions.

V. CLAIMS 16-27 ARE PATENTABLE OVER HORN IN VIEW OF BAUMGARTNER, CANDELORE, WINTV, AND CHAO

The proposed combination of Horn, Baumgartner, Candelore, WinTV, and Chao lacks both evidentiary and technical foundation. Petitioner strings together disparate references without articulating a coherent rationale or addressing the practical and architectural incompatibilities among them. The Board should reject Ground 8 for at least the following reasons.

As discussed in the POR (43–48) and reaffirmed above, Petitioner has not met its burden to show that the WinTV Manual (EX1010) was publicly accessible prior to the critical date. Any claim relying on WinTV—including every claim challenged in Ground 8—fails as a matter of law. *See Hulu*, IPR2018-01039, Paper 29 at 16.

Petitioner offers a broad assertion that a POSITA would have found it obvious to use thumbnails for folders, as taught by Chao, because Horn uses thumbnails for individual items. Petitioner's argument is nothing more than a generic assertion of UI improvement and does not address the specific motivations or technical feasibility of modifying Horn's architecture to integrate Chao's teachings.

Critically, Horn teaches away from additional complexity by emphasizing memory and space efficiency as a core design principle. EX1005, 3:10–22; EX2040, ¶258. Adding additional thumbnail layers, particularly ones linked to folders and involving separate image generation and rendering logic as in Chao, would introduce processing and memory overhead that undermines Horn's intended architecture.

In particular, Petitioner cites no portion of Horn suggesting extensibility or UI modularity allowing for thumbnail overlays on folders. Chao provides no roadmap for integration with Horn's memory-managed data structure. Petitioner does not address hardware/software integration challenges, such as differences in how metadata is generated and rendered in Horn versus Chao.

Petitioner's attempt Patent Owner's structural objections as "bodily incorporation" arguments mischaracterize the POR. The issue is not whether one could imagine combining five references, but whether there is a teaching, motivation, or expectation of success in doing so—none of which Petitioner establishes with respect to Chao's integration into Horn's MFS-based framework. The Petition does not even attempt to explain how Chao's folder-thumbnails would be generated, stored, and displayed within Horn's architecture.

Petitioner's reply relies on improper hindsight, fails to articulate a plausible integration of Chao's thumbnail system into Horn's architecture, and disregards the incompatibility between the systems. Accordingly, Petitioner has not met its burden to show unpatentability of claims 16–27 by a preponderance of the evidence.

VI. KAPLAN, BRYANT, WONG, AND CANDELORE DO NOT DISCLOSE CLAIMS 16 AND 21 EITHER ALONE OR IN COMBINATION

Petitioner's reply does not cure its failure to explain how the teachings of Kaplan, Bryant, Wong, and Candalore would actually be combined. As set forth in the POR (52–54), Petitioner merely recites teachings from each reference in isolation and offers high-level motivations unsupported by specific technical reasoning or mapping. This "pick-and-choose" approach falls short. 35 U.S.C. §312(a)(3).

Petitioner uses Wong for Grounds 9 and 10. Wong, as admitted by Petitioner, may not be prior art. Pet. at 9. To support its 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 the following terms found in each independent claims of the Challenged Claims”. Petitioner then characterizes the terms as Terms 1-3, respectively. Pet. at 10. However, each of Terms 1-3 has written support in several applications prior to 11/9/2017. EX2040, ¶¶63-87. In fact, each term has support in the priority application JP2004-378767. *Id.*

However, even assuming, *arguendo*, Wong is a prior art (which it is not), Petitioner fails to show how Wong's user profiles are integrated into the Kaplan-Bryant system, or how they are associated with characters identifying users, as required by the claims. Wong's disclosure of usernames is insufficient to establish that those usernames function as “characters” within the meaning of the claims. Petitioner's argument fails to provide a concrete technical path for integration.

Petitioner continues to rely on Kaplan's Figure 4 for both the first and second user interfaces, despite the claims and specification clearly requiring distinct, sequential interfaces (EX1001, 6:19–41, Figs. 4–7). Petitioner's interpretation collapses the two interfaces into a single menu, which a POSITA would not have understood as satisfying the claim structure. EX2040, ¶¶273–275.

Moreover, Petitioner's assertion that folder names like “Favorites” and “History” function as “characters” indicating user identity is unsupported and

inconsistent with the claim language, which explicitly ties these characters to user profiles. Wong again fails to supply the missing disclosure or motivation to combine.

Petitioner's reply fails to remedy the deficiencies identified in the POR.

A. Limitations 16[i]–[m], 21[i]–[m], and Claims 18, 24 are Patentable

Petitioner relies on “Favorites” and “History” folders in Kaplan, not on actual user profiles as required by the claims. Petitioner offers no evidence that the same video appears across different user profiles, nor how the proposed system would manage such cross-profile associations. EX2040, ¶¶282–285.

B. Limitations 16[j], 16[k], 21[j], 21[k]: Failure to Address Thumbnail Persistence or Provide Mapping

Petitioner cites Kaplan's pointers without explaining how removal from one profile retains visibility in another, or how the second group of thumbnails continues to display the removed video. There is no mapping for 21[j] at all. General citations to Kaplan's Figs. 9A–9C are conclusory and insufficient. EX2040 ¶¶285–286.

C. Collateral Estoppel Does Not Apply

Petitioner's attempt to distinguish *Skyhawke Techs., LLC v. Deca Int'l Corp.*, 828 F.3d 1373 (Fed. Cir. 2016) is unavailing. Contrary to Petitioner's assertion, the applicability of collateral estoppel turns not merely on whether the same claim construction issue was explicitly raised by the parties, but on whether the underlying legal standard used to construe the claims materially differed. In *Skyhawke*, the Federal Circuit rejected collateral estoppel where the prior proceeding applied the

BRI standard and the later one applied *Phillips*, because the two standards can produce different outcomes—even where the specific claim construction was not affirmatively disputed in the later case. That is precisely the situation here. The prior IPR applied BRI, while this proceeding applies *Phillips*, and Petitioner fails to show that limitations 16[k] and 21[k] would necessarily be construed the same way under both standards, nor does the Petition offer any construction for this limitation. As such, the claim construction issue has not been “actually litigated” and collateral estoppel does not apply.

Moreover, the challenged claim here (claim 16) includes elements (*e.g.*, 16[l], 16[m]) absent from the '783 patent, meaning the patentability issues are not identical. Thus, estoppel is inapplicable.

D. Limitations 16[m], 21[l], 21[m]: No Reasonable Expectation of Success for Decryption Integration

Petitioner relies on Candelore's embedded IC and smart card setup without showing how such hardware could be implemented in Kaplan-Bryant's architecture. There is no technical rationale, motivation, or expectation of success. EX2040, ¶¶289–294. Petitioner's argument relies on hindsight and amounts to impermissible “plug-and-play” bodily incorporation. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.”).

E. Claims 18 and 24: No Disclosure of Recommendation Based on Preferences

Kaplan's "History" folder merely logs previously accessed videos. It does not generate a recommendation list based on user selections or preferences, as required by claims 18 and 24. Horn likewise discloses passive categorization, not dynamic preference-based generation. EX2040 ¶¶296–300.

Petitioner fails to show how the proposed combination discloses or renders obvious the challenged limitations. Petitioner has not met its burden.

VII. CONCLUSION

For at least the foregoing reasons, the Board should confirm the patentability of Claims 16-27.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 6th day of June, 2025, a copy of the attached PATENT OWNER SUR-REPLY, together with all exhibits was served by electronic mail to the attorneys of record, at the following addresses:

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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 Sur-reply and 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 Sur-reply indicates that the Sur-reply contains 5,599 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

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