

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

ROKU, INC.,
Petitioner,

v.

UNIVERSAL ELECTRONICS INC.,
Patent Owner.

Case IPR2022-01289
Patent No. 9,847,083

**PATENT OWNER'S SUR-REPLY TO
PETITIONER'S REPLY**

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TABLE OF EXHIBITS

Exhibit No.	Description
2001	Declaration of Dr. Michael S. Scordilis in Support of Patent Owner's Response
2002	Transcript of the June 7, 2023 Deposition of Bruce McNair
2003	U.S. Patent No. 9,716,853 to Arling et al.
2004	Excerpts from Deller, John et al., "Discrete-Time Processing of Speech Signals," Macmillan Publishing Company, 1993
2005	Peacocke, Richard D. et al., "An Introduction to Speech and Speaker Recognition," IEEE Computer, Volume 23, Issue 8, August 1990
2006	Mariani, J., "Recent Advances in Speech Processing," IEEE International Conference on Acoustics, Speech, and Signal Processing, 1989
2007	Martin, E. A. et al., "Dynamic Adaptation of Hidden Markov Models for Robust Isolated-Word Speech Recognition," IEEE International Conference on Acoustics, Speech, and Signal Processing, 1988
2008	Bahl, L. R. et al., "Some Experiments with Large-Vocabulary Isolated-Word Sentence Recognition," IEEE International Conference on Acoustics, Speech, and Signal Processing, 1984

I. INTRODUCTION

Patent Owner's Response ("POR") showed that the Petition failed to prove obviousness. Petitioner's Reply ignores the language of the Challenged Claims and Patent Owner's arguments, and simply repeats the Petition's flawed arguments.

II. CLAIM CONSTRUCTION

A. The Claimed "protocol and formatting information" Is Separate And Distinct From The Claimed "plurality of individual command function entries."

The Board should find that the claimed "protocol and formatting information" is separate and distinct from the claimed "plurality of individual command function entries" and the data contained in the command function entries. (POR at 12-17.)

Petitioner raises several Reply arguments that do not have merit.

First, Petitioner argues that Patent Owner "offers no rational legal explanation" for its construction and that Patent Owner's construction is "nowhere recited in the claims." (Reply at 1-2, 7.)

Petitioner is wrong because Patent Owner's proposed construction is based on the plain language of the Challenged Claims. The law is clear that where "a claim lists elements separately, 'the clear implication of the claim language' is that those elements are 'distinct component[s]' of the patented invention." *See Becton, Dickinson and Co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010); *see also Kyocera Senco Indus. Tools Inc. v. Intl. Trade Comm'n*, 22 F.4th

1369, 1382 (Fed. Cir. 2022) (holding that components listed separately were presumed to be distinct).

Here, the claimed “protocol and formatting information” and the claimed “plurality of individual command function entries” are each listed as separate and distinct elements of the claimed “codeset record.” (EX2001, ¶¶ 51-52; EX1001 at claims 1 and 12.) The plain language of the Challenged Claims supports that the proper construction requires that the claimed “protocol and formatting information” be separate and distinct from the claimed “plurality of individual command function entries” and the data contained in the command function entries. (*Id.*)¹

Second, Petitioner argues that “Claims 1 and 12 use the open transition ‘comprises’ before enumerating required data types, meaning the individual command function entries may include other information, including protocol and formatting information.” (Reply at 9 (citing *Crystal Semiconductor Corp. v. TriTech Microelectronics Int’l, Inc.*, 246 F.3d 1336, 1348 (Fed. Cir. 2001)).)

Petitioner’s caselaw confirms that Petitioner’s argument is without merit. According to *Crystal Semiconductor*, the term “comprising” creates a presumption “that the claim does not exclude additional, *unrecited* elements.” 246 F.3d at 1348

¹ The plain language of the Challenged Claims also supports that the “protocol and formatting information” is separate and distinct because the Challenged Claims recite that the same “protocol and formatting information” is used to transmit a command communication regardless of which individual command function entries and their associated command data are used. (EX2001, ¶ 54.)

(emphasis added). The term “protocol and formatting information” *is recited*. While the “plurality of individual command function entries” can include additional *unrecited* information, they cannot include the recited “protocol and formatting information,” which is separate and distinct from the “plurality of command function entries.”

Third, Petitioner argues that the specification’s description of “protocol and formatting information” does not support Patent Owner’s construction because “claim scope is not limited to a single embodiment absent ‘a clear intention’” (Reply at 10) and “the ‘083 specification provides that blocks of diagram 7b can be combined” (*id.* at 11, 14 (citing EX1001 at 11:30-34)).

Petitioner’s argument that the specification teaches that the “blocks of diagram 7b can be combined” mischaracterizes the record and ignores the clear claim language. At no point does the specification state that the blocks of diagram 7b—which illustrate the content of a code set record 706—can be combined. (EX1001 at 11:30-34.) There can be no dispute that the specification describes protocol and formatting information as only being separate and distinct from command function entries. (EX2001, ¶¶ 55-57; EX1001 at 10:47-55, FIG. 7b,) Petitioner’s assertion that “claim scope is not limited to a single embodiment” is also irrelevant because Patent Owner’s construction is based on the plain language of the claims, which Patent Owner ignores, not a waiver or disclaimer.

Indeed, the facts at issue here are nearly identical to those in *Becton*. In *Becton*, the Federal Circuit construed two claim limitations as being separate and distinct where the claims listed the two limitations separately and the specification described the two limitations as separate structures. 616 F.3d at 1254. Here, as in *Becton*, the Challenged Claims clearly recite “protocol and formatting information” and the “plurality of individual command function entries” separately, and the specification of the ‘083 patent only describes protocol and formatting information as separate and distinct from command function entries. (EX2001, ¶¶ 52-58; EX1001 at 10:47-55, FIG. 7b, claims 1 and 12.)

Fourth, Petitioner argues that Patent Owner “is administratively estopped from arguing that protocol and formatting information requires separate and distinct storage because it already appealed patentability to this Board *ex parte* and *failed* to argue that protocol and formatting information must be separate and distinct...” (Reply at 12 (citing *SynQor, Inc. v. Vicor Corp.*, 988 F.3d 1341, 1354 (Fed. Cir. 2021)).)

Petitioner’s argument is legally unsupported. The *SynQor* decision applied collateral estoppel to an issue ***that was actually litigated and decided*** in prior reexamination proceedings. 988 F.3d at 1354. Petitioner concedes that Patent Owner’s proposed construction was ***not*** previously litigated or decided. (Reply at 12.) Rather, the previous issue was whether the prior art failed to disclose “a series

of individual command function entries.” (EX1002 at 224, 255, 282, 369.) Because the Applicant asserted that the prior art did not disclose “command function entries,” there was no reason to litigate whether “protocol and formatting information” and “command function entries” must be separate. Collateral estoppel does not apply to an unlitigated issue.

B. The Claimed “protocol and formatting information” Must Be Included In The Claimed “provisioned codeset record” Itself.

The Board should construe the Challenged Claims to require that the “protocol and formatting information” be included in the “provisioned codeset record” itself. (POR at 17-19.) *Petitioner does not dispute Patent Owner’s proposed construction.* (Reply at 2-14.)

C. The Claimed “protocol and formatting information” Is “the set of procedures needed to transmit commands from one device to another in a way that the receiving device can make sense of and use the commands.”

The Board should construe the term “protocol and formatting information” as “the set of procedures needed to transmit commands from one device to another in a way that the receiving device can make sense of and use the commands.” (POR at 19-21.)

Petitioner argues that Patent Owner’s construction is a “narrowing construction” and that Patent Owner “has not presented a basis to drastically diverge

from the ordinary and customary meaning of ‘protocol and formatting information’” other than Petitioner’s expert’s deposition statements. (Reply at 1-5.)

Petitioner’s argument is incorrect because Patent Owner’s construction is not a “narrowing construction.” Rather, Patent Owner’s proposed construction *is the plain and ordinary meaning* of “protocol and formatting information.” (EX2001, ¶¶ 70-71; EX1001 at 10:47-54, claims 1 and 12.)

Other than pointing out that the phrase “protocol and formatting information” contains different words than Patent Owner’s proposed construction² and incorrectly arguing that Patent Owner’s construction is a “narrowing construction,” Petitioner fails to identify how Patent Owner’s construction is wrong. (Reply at 1-5.)

Importantly, Petitioner *cannot* argue that Patent Owner’s construction is wrong because Patent Owner’s construction is consistent with its expert’s testimony (and Patent Owner’s expert’s testimony) regarding the plain and ordinary meaning of “protocol and formatting information” and the ‘083 patent’s description of “protocol and formatting information.” (EX2001, ¶¶ 67-69; EX2002 at 32:19-33:3, 33:22-34:9, 36:5-21; EX1001 at 10:47-54 (“protocol and formatting information ... describe[s] the physical protocol requirements for transmitting the command data elements which comprise this codeset”).) Petitioner’s argument that the ‘083

² A construction that merely repeats the term to be construed is no construction at all. *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997).

patent's "examples of protocol and formatting information are not limiting" (Reply at 5) is irrelevant because Patent Owner's proposed construction is broader than, and encompasses, the specification's examples of "protocol and formatting information." (EX2001, ¶ 71.)

The Petition, the Reply, and Petitioner's supporting expert declaration also fail to define "protocol and formatting information." (Petition at 26, 36-37, 44-45; EX1003, ¶¶ 107-108, 123-124; Reply at 3, 17.) At best, Petitioner hints in its Reply that "protocol and formatting information" should be construed as nothing more than information used in transmission. (Reply at 5, 17.) Petitioner provides no evidence to support such a broad construction. (*Id.*) Further, "information used in transmission" is so broad that it could encompass any information in a transmitting device, which effectively renders the term "protocol and formatting information" meaningless. Such a construction cannot be correct. *Wasica Fin. GmbH v. Contl. Automotive Sys., Inc.*, 853 F.3d 1272, 1288 n. 10 (Fed. Cir. 2017) ("It is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous.").

The parties dispute the meaning of "protocol and formatting information" and the Board should adopt Patent Owner's proper construction of the term.³

³ See *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360-61 (Fed. Cir. 2008) (holding that when the parties raise a dispute regarding the proper

III. ARGUMENT

A. Petitioner Has Failed To Show That Aginsky Discloses, Teaches, Or Suggests “the provisioned codeset record comprising protocol and formatting information.”

1. Petitioner Has Failed To Show That Aginsky Discloses, Teaches, Or Suggests “the provisioned codeset record comprising protocol and formatting information” Under The Proper Construction.

According to the Petition, Aginsky's "SIGNAL columns 112-1 and 112-2" "disclose[] the provisioned codeset record comprising protocol and formatting information." (Petition at 36-37.)

The POR showed that Aginsky fails to disclose, teach, or suggest "the provisioned codeset record comprising protocol and formatting information" because the information in Aginsky's SIGNAL columns 112-1 and 112-2 (*i.e.*, "the type of signal as well as the code or code sequence of the signal") (EX1004 at 9:7-10) is not protocol information and it is not formatting information. (POR at 23-27.)⁴ Petitioner raises several Reply arguments that do not have merit.

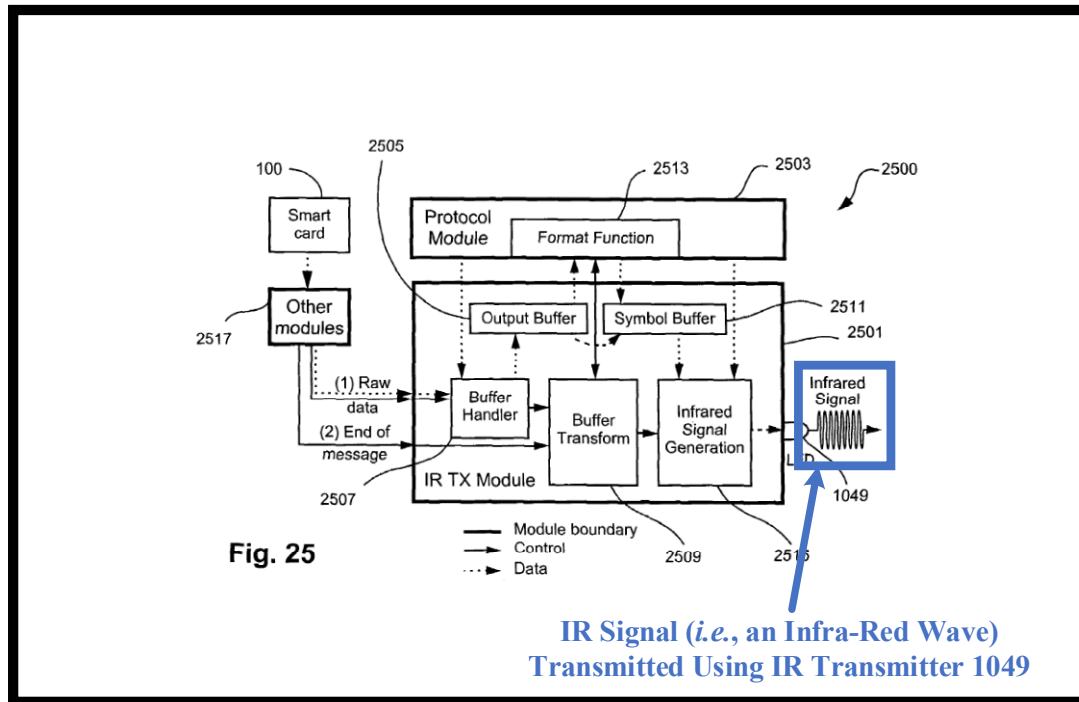
First, Petitioner argues that the command signals of Aginsky's SIGNAL columns 112-1 and 112-2 can be "frequency sets, coded IR signals, or Bluetooth signals," and that each of these signals includes or incorporates protocol and

scope of the claims, the court must resolve the meaning and scope of the patent claims).

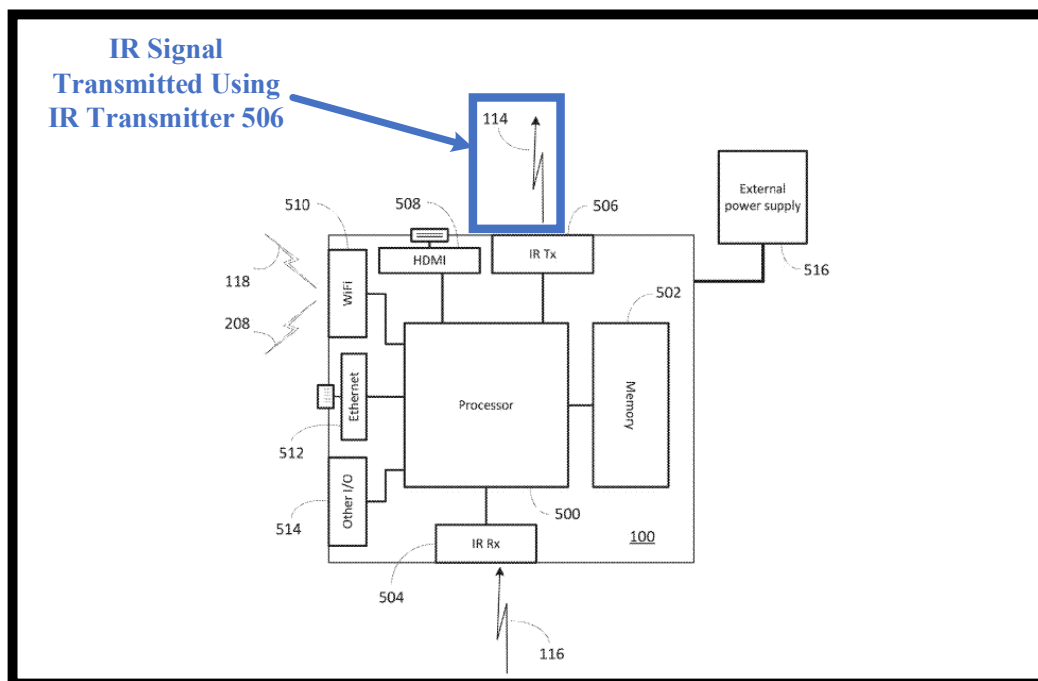
⁴ Petitioner's assertion that "[t]here is no dispute that Aginsky's codeset record discloses 'protocol and formatting information'" (Reply at 1) is wrong. (POR at 23-27.)

formatting information within the signal. (Reply at 14-16; *see also id.* at 5-6.) Petitioner's argument is irrelevant, misleading, and ignores Aginsky's teachings and the clear language of the Challenged Claims.

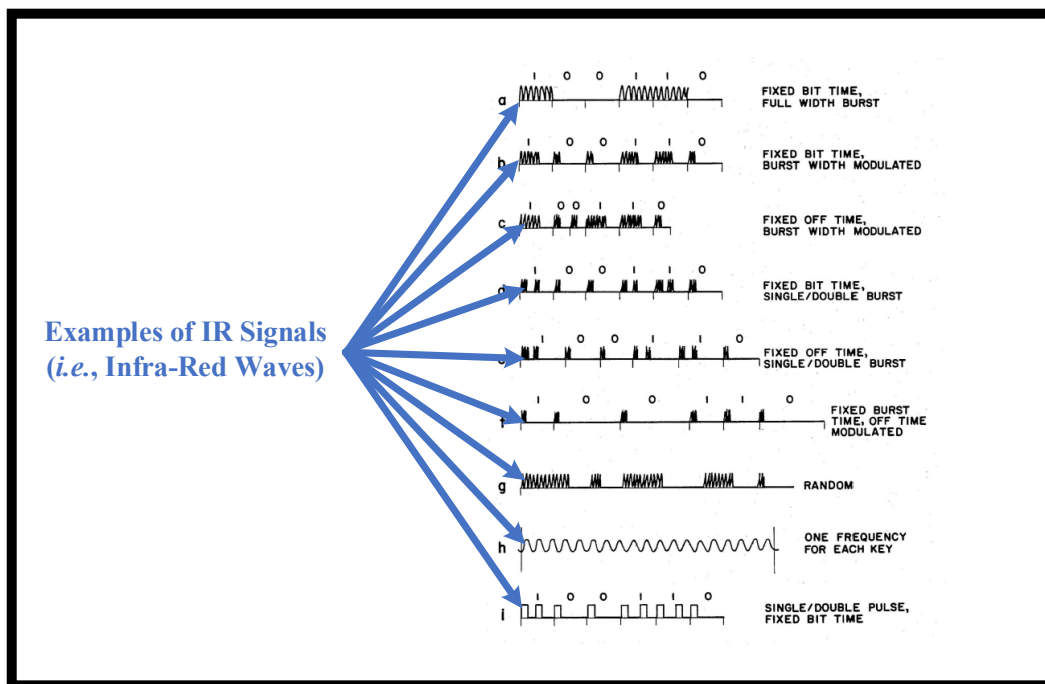
There is no dispute that the Challenged Claims require that the claimed protocol and formatting information be ***stored in the codeset record itself***. (EX2001, ¶ 78.) Petitioner's argument that frequency set, coded IR, and Bluetooth ***signals*** include protocol and formatting information has nothing to do with the information that is ***actually stored*** in Aginsky's alleged codeset records. According to Petitioner's evidence, each of frequency set, coded IR, and Bluetooth ***signals*** (which are electromagnetic waves transmitted from a controlling device)—***is not data in a codeset record stored in a controlling device***. (See, e.g., EX1007 at [0045], [0111], [0125], [0284] (distinguishing IR codes stored in memory from IR signals transmitted from a remote control); EX1036 at 3:47-58, 16:33-37, 18:53-64, 44:6-12 (same); EX1044 at 1:42-46, 4:28-37 (same); EX2003 at 3:58-61, 3:67-4:11, 4:38-41, 5:18-21, 13:59-61.) Indeed, the Challenged Claims have separate and distinct limitations for signals transmitted from the controlling device (*i.e.*, “causing the controlling device to transmit a command communication”) and data stored in the controlling device (*i.e.*, “the provisioned codeset record comprising...”). (EX1001 at claims 1 and 12.)



(EX1036 at FIG. 25 (annotated); *see also id.* at 1:16-40, 16:36-37, 40:39-45.)



(EX2003 at FIG. 5 (annotated); *see also id.* at 3:58-61, 4:7-9, 5:20-21.)



(EX1044 at FIG. 1 (annotated).)

Petitioner uses Aginsky's "SIGNAL" column heading to try to erase the distinction between a transmitted signal and stored data. (EX1004 at 9:7-10; Petition at 37; EX2001, ¶ 83.) But, Petitioner cannot run from Aginsky's express teaching regarding what is *actually stored* in SIGNAL columns 112-1 and 112-2 of data structures 115' and 116' (i.e., the alleged codeset records): "the type of signal as well as the code or code sequence of the signal." (EX1004 at 9:7-10; Petition at 37; EX2001, ¶ 83.)

All the record evidence confirms that the information *actually stored* in SIGNAL columns 112-1 and 112-2 (i.e., "the type of signal as well as the code or code sequence of the signal") *is not protocol and formatting information*.

Regarding “the code or code sequence of the signal,” **Petitioner does not contend** that “the code or code sequence of the signal” is protocol and formatting information. (Petition at 36-37; EX2002 at 46:16-47:2, 47:11-20.)

Regarding “the type of signal,” Patent Owner has provided **unrebutted** evidence that an indication of a signal type (*e.g.*, an indication of a frequency set, coded IR, or Bluetooth signal type) **is not** protocol and formatting information. (EX2001, ¶¶ 83-85.) Petitioner’s attorney-only argument that “denoting ‘Bluetooth’ or ‘coded IR’ conveys protocol and formatting to a POSITA as these are well-known standards” is not evidence and is wrong. (Reply at 16.) An indication of a “Bluetooth” or “coded IR” signal type is not itself protocol and formatting information. (EX2001, ¶ 83.) The protocol and formatting information for a “Bluetooth” or “coded IR” signal must still be received, obtained, or looked up. (*Id.*)

Regardless of whether a frequency set, coded IR, or Bluetooth **signal** includes protocol and formatting information (as Petitioner alleges), there is no evidence in the record that Aginsky’s data structures 115’ and 116’ (*i.e.*, the alleged codeset records) actually store any protocol or formatting information, as the Challenged Claims require. (EX2001, ¶ 85.)

Aginsky does not disclose, teach, or suggest that protocol or formatting information is stored in Aginsky’s SIGNAL columns 112-1 or 112-2; Petitioner has identified no such disclosure, teaching, or suggestion; and Patent Owner has

provided un rebutted evidence that “[n]o POSITA would interpret Aginsky’s SIGNAL columns 112-1 and 112-2 to contain protocol and formatting information.” (EX2001, ¶¶ 86, 89-91; Petition at 25-26, 36-37.)

Second, Petitioner reproduces Aginsky’s statement: “the exchanged data structure may ... include protocols, rules, or other information useful to carrying out remote control of the controllable database,” and argues that it constitutes protocol and formatting information. (Reply at 17 (citing Petition at 26); *see also id.* at 16 (same).) Notably, the statement was referenced only in a background section of the Petition and not included in the claims analysis sections of the Petition and supporting declaration. According to Petitioner, “the ‘protocols, rules, or other information’ are used in transmission and nothing more is required.” (*Id.* at 17 (Petitioner failing to cite any record evidence).)

Petitioner’s argument is without merit because Patent Owner has provided **unrebutted** evidence that a POSITA would **not** have understood the referenced “protocols” and “rules” to be the claimed protocol and formatting information. (EX2001, ¶ 87; *see also* Reply at 17-18 (Petitioner responding solely with attorney argument).) Petitioner **concedes** that Aginsky’s “protocols” and “rules” are merely (i) user/device permissions and restrictions (*e.g.*, password requirements, child permissions, etc.); and (ii) customized control layouts for devices (*e.g.*, how the buttons are arranged). (Reply at 17; *see also* EX2001, ¶ 87; EX1004 at 6:7-7:16,

9:15-28, 10:27-50, 11:49-54; *see also id.* at FIG. 1C (at 121-1 and 121-2).) There is also no record evidence that these “protocols” and “rules” are “used in transmission” as the Challenged Claims require.

Third, Petitioner argues that Aginsky teaches a process of checking whether a command signal is “legal,” and that this process of checking whether a command signal is “legal” teaches the claimed “protocol and formatting information. (Reply at 17-18 (citing EX1004 at 12:31-40).)

The Board should disregard Petitioner’s argument because it is untimely, unsupported, and wrong. Attorney argument is not evidence, *see Icon Health & Fitness, Inc. v. Strava, Inc.*, 849 F.3d 1034, 1043 (Fed. Cir. 2017), and the Board “will not consider arguments ... that are not presented and developed in the Petition.” *DIRECTV, LLC v. Qurio Holdings, Inc.*, IPR2015-02007, Paper No. 6 at 14 (PTAB April 4, 2016). Petitioner provides no testimony of a POSITA to support its new theory and instead relies entirely on attorney argument. (Reply at 17-18 (failing to cite to testimony of a POSITA).) Further, Aginsky at 12:31-40 was not cited or discussed anywhere in the Petition or supporting declaration. (*See generally* Petition (failing to cite EX1004 at 12:31-40); EX1003 (same).) The Petition does not contain the word “legal” anywhere. (*See generally* Petition.)

Petitioner’s improper argument is also factually wrong. The Challenged Claims are clear that the claimed “protocol and formatting information” must be

stored in a codeset record on a “controlling device.” (EX1001 at claims 1 and 12.) Aginsky’s process 307 of checking whether a command signal is “legal” is ***not performed on Aginsky’s alleged “controlling device.”*** (EX1004 at 12:27-42; *see also* Petition at 33-36 (Petitioner asserting that Aginsky’s “remote device 107-1” is the claimed “controlling device”).) Rather, process 307 is performed on Aginsky’s ***“controllable device.”*** (*Id.*) A process performed on a ***“controllable device”*** is not “protocol and formatting information” stored in a codeset record on a ***“controlling device.”***

2. Petitioner Has Failed To Show That Aginsky Discloses, Teaches, Or Suggests “the provisioned codeset record comprising protocol and formatting information” Under Patent Owner’s Construction.

The Board should construe the Challenged Claims to clarify that the claimed “protocol and formatting information” is separate and distinct from the claimed “plurality of individual command function entries” and the data contained in the command function entries.

Petitioner has failed to show that Aginsky discloses, teaches, or suggests “the provisioned codeset record comprising protocol and formatting information” under Patent Owner’s construction because Petitioner failed to identify any alleged “protocol and formatting information” that is separate and distinct from Aginsky’s alleged “plurality of individual command function entries.” (POR at 21-23.)

Petitioner argues that Aginsky's "'protocols, rules, or other information' are separate and distinct from Aginsky's commands." (Reply at 18.) Petitioner also argues that: "In a codeset having command entries and protocol and formatting information, if the protocol and formatting information is not expressed in a same storage location as the entries, by definition, it must be outside. These are the only two options." (*Id.* at 18-19.) Petitioner's Reply arguments are without merit for at least two reasons.

First, as shown above, Petitioner has not shown (and cannot show) that Aginsky's "protocols, rules, or other information" are "protocol and formatting information." (EX2001, ¶ 87.) Thus, whether Aginsky's "protocols, rules, or other information" are separate and distinct from Aginsky's command function entries is irrelevant.

Second, Petitioner's argument that protocol and formatting information can be in only two places in "a codeset having command entries and protocol and formatting information" incorrectly presumes that Aginsky's alleged codeset records have "protocol and formatting information" in the first place. As discussed above, in the POR, and in Patent Owner's expert's declaration, Aginsky's alleged codeset records *do not have any "protocol and formatting information."* (POR at 23-27; EX2001, ¶¶ 80-91.)

B. Petitioner Has Failed To Show That Aginsky In Combination With Stammler Or Hanson Discloses, Teaches, Or Suggests The Phonetic Representations Limitation.

The Petition asserts that Aginsky as modified by Stammler or Hanson “teaches” the Phonetic Representations Limitation. (Petition at 40-42, 74-75.)

Petitioner has failed to show that Aginsky in combination with Stammler or Hanson discloses, teaches, or suggests the Phonetic Representations Limitation because Aginsky, Stammler, and Hanson fail to disclose, teach, or suggest phonetic representations of function names (or synonyms of function names) stored in a codeset record (or in command function entries within a codeset record), as the Challenged Claims require. (POR at 27-30, 49-50.)

Petitioner *does not dispute* that Aginsky, Stammler, and Hanson all fail to disclose, teach, or suggest phonetic representations of function names (or synonyms of function names) stored in a codeset record (or in command function entries within a codeset record). (Reply at 21-22.)

Petitioner also *does not dispute* that Hanson fails to disclose, teach, or suggest phonetic representations at all. (*Id.*; EX2001, ¶ 155.)

Rather than address the deficiencies in the prior art and the Petition, Petitioner vaguely argues that a “POSITA would have been motivated to apply Stammler’s teachings in implementing Aginsky’s data structure.” (Reply at 21-22 (citing Petition at 41).) However, applying *unspecified* Stammler teachings to an

unspecified Aginsky data structure in an *unspecified* way does not result in the claimed invention.

C. Petitioner Has Failed To Show That Aginsky In Combination With Stammler Or Hanson Discloses, Teaches, Or Suggests “a speech recognition engine.”

Petitioner has failed to show that Aginsky in combination with Stammler or Hanson discloses, teaches, or suggests “a speech recognition engine” because:

(i) the Petition does not assert that Aginsky discloses, teaches, or suggests a “speech recognition engine”; and

(ii) the Petition does not propose modifying Aginsky to have a “speech recognition engine.” (POR at 31-32, 51-52; *see also* Petition at 45-46, 75-76.)

Petitioner *concedes* that the Petition does not propose modifying Aginsky to have a “speech recognition engine,” but then argues *for the first time* that no modification or motivation was necessary because Aginsky allegedly teaches a “speech recognition engine.” (Reply at 26 (“There need be no motivation to do what is expressly taught.”); *id.* at 22-23.)

Petitioner’s belated, unsupported, attorney-only argument is not evidence and cannot cure the Petition’s deficiencies. *See Icon Health*, 849 F.3d at 1043; *DIRECTV*, IPR2015-02007, Paper No. 6 at 14. There is simply no evidence in the Petition or supporting declaration that Aginsky teaches a “speech recognition engine.” (Petition at 45-46, 75-76; EX1003, ¶¶ 149-151, 264-266.) Petitioner’s new

argument that Aginsky teaches a “speech recognition engine” is based solely on Petitioner’s counsel’s *ipse dixit* and is not supported by the testimony of a POSITA. (Reply at 22-23.)

Patent Owner has also provided *unrebutted* evidence that Aginsky does not teach a “speech recognition engine.” (EX2001, ¶¶ 122-123.) Aginsky, at best, references voice command capability in passing, with no further detail. (EX1004 at 6:5, 8:11, 9:61.) Patent Owner’s expert demonstrated that voice command capability, alone, does not teach a “speech recognition engine.” (EX2001, ¶¶ 122-123.)

D. Petitioner Has Failed To Show That Aginsky Discloses, Teaches, Or Suggests The Processing Device Limitation.

The Petition asserts that Aginsky, alone, discloses the Processing Device Limitation of Challenged Claim 12. (Petition at 46-47, 76.)

Petitioner has failed to show that Aginsky discloses, teaches, or suggests the Processing Device Limitation because Petitioner has provided *no evidence or argument* that Aginsky discloses, teaches, or suggests a processor on controllable device 101-1 that specifically causes a codeset record to be provisioned to a controlling device, as the Processing Device Limitation requires. (POR at 32-33, 52.)

Petitioner argues that Aginsky discloses the Processing Device Limitation because Aginsky teaches that controllable device 101-1 selects a data structure and

delivers the data structure to remote device 107-1. (Reply at 23-24 (citing Petition at 35-36, 47).)

Petitioner's argument ignores the claim language. The Processing Device Limitation does not merely recite provisioning a codeset record to a controlling device. (EX1001 at claim 12.) Rather, the Processing Device Limitation expressly recites that *a processing device must execute stored instructions* that cause a codeset record to be provisioned to a controlling device. (*Id.*) The Petition and the Reply do not address this express claim requirement. (Reply at 23-24; Petition at 46-47, 76.)

E. Petitioner Has Failed To Show That A POSITA Would Have Been Motivated To Modify Aginsky In View Of Stammler Or Hanson To Arrive At The Phonetic Representations Limitation.

Petitioner has failed to show that a POSITA would have been motivated to modify Aginsky in view of Stammler or Hanson to arrive at the Phonetic Representations Limitation because:

(i) Petitioner's reasons for modifying Aginsky in view of Stammler and Hanson fail to explain why a POSITA would have modified Aginsky in the specific manner of the claimed invention; and

(ii) a POSITA would not have been motivated to use phonetic representations in Aginsky. (POR at 34-39, 53-56.)

Petitioner's Reply fails to address Patent Owner's arguments. (Reply at 24-26.)

First, regarding Patent Owner's argument that Petitioner has failed to explain why a POSITA would have been motivated to modify Aginsky in the specific manner of the claimed invention, Petitioner asserts that its motivation is sufficient because: (i) "the Petition's discussion of limitation [1.a.6] expressly begins: 'Aginsky as modified by Stammler teaches wherein each of the plurality of individual command function entries within the codeset record comprises...'; and (ii) the "Petition later explains that 'a POSITA would have been motivated to apply Stammler's teachings ...'" (Reply at 25 (citing Petition at 40-41); *see also id.* at 25-26 ("In view of Aginsky's disclosure of voice commands and data structure, it would be obvious to modify Aginsky's system using Hanson's teaching of automated speech command discovery.") (citing Petition at 66-71).)

Notably, Petitioner's argument again fails to identify *any* alleged motivation to modify Aginsky in view of Stammler or Hanson—let alone a motivation to modify Aginsky in the specific manner of the claimed invention. (*Id.*) Petitioner's evasive and non-responsive argument confirms that the Petition is deficient.

There is no dispute that the Phonetic Representations Limitation requires that phonetic representations of a function name and synonyms of the function name be stored *in a specific codeset record* on the controlling device (*i.e.*, the codeset record

provisioned to the controlling device for use in commanding functional operations of the target appliance and comprising protocol and formatting information and a plurality of command function entries), and *in a specific location within that specific codeset record* (*i.e.*, in each of the command function entries within the provisioned codeset record). (EX1001 at claims 1 and 12; EX2001, ¶ 110; Reply at 24-26.)

Petitioner failed to explain why a POSITA would have added phonetic representations⁵ to the specific data structures on Aginsky's controlling device that Petitioner relies on in its obviousness analysis (*i.e.*, either of the data structures in tables 115'-116'), as opposed to different data structures in the controlling device's memory, some construct in the controlling device's memory other than a data structure, or to a different device altogether (*e.g.*, to a remote server). (POR at 35, 54.) *Petitioner does not dispute that it failed to provide this explanation.* (Reply at 24-26.)

Petitioner also failed to explain why a POSITA would have added phonetic representations to each of the alleged command function entries in these data structures, as opposed to some other location in the data structures, to only a subset

⁵ Petitioner does not dispute that Hanson fails to disclose, teach, or suggest phonetic representations. (Reply at 25-26; EX2001, ¶ 155.)

of the alleged command function entries, etc. (POR at 35, 54.) ***Again, Petitioner does not dispute that it failed to provide this explanation.*** (Reply at 24-26.)

Petitioner's Reply confirms that Petitioner has, at most, provided generic reasons for adding voice control and synonym support to Aginsky (*see, e.g.*, Reply at 25 ("Modifying Aginsky with Stammler supports Aginsky's goal of providing flexible and customizable universal remotes.")), which cannot support a finding of obviousness as a matter of law. *See, e.g., ActiveVideo Networks, Inc. v. Verizon Commun., Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012).

Second, regarding Patent Owner's argument that a POSITA would not have been motivated to use phonetic representations in Aginsky, Petitioner responds that the "Petition does *not* propose to bodily incorporate Stammler's device into Aginsky's device." (Reply at 25.) "Instead, the Petition states 'a POSITA would have been motivated to *modify* Aginsky with the teachings of Stammler to include phonetic representations and synonyms as elements of Aginsky's dataset ...'" (*Id.* (citing Petition at 32, 41).)

Petitioner's Reply is evasive and non-responsive. Patent Owner's argument has nothing to do with bodily incorporation. Patent Owner's argument is that a POSITA would have used whole words in Aginsky, not phonetic representations. (POR at 37-39, 55; EX2001, ¶¶ 114-120.)⁶ Simply pointing out that the Petition

⁶ Whole words are not phonetic representations of words. (*Id.*)

asserts that a POSITA would have been motivated to modify Aginsky to include phonetic representations ignores Patent Owner's argument to the contrary. (Reply at 25.) Patent Owner's position that a POSITA would not have been motivated to use phonetic representations in Aginsky remains *unrebutted*.

F. Petitioner Has Failed to Show That Dependent Challenged Claims 2-6, 7-11, And 13-19 Are Obvious.

1. Challenged Claims 6 And 18.

Petitioner has failed to show that Challenged Claims 6 and 18 are obvious because Petitioner has failed to show that the prior art, alone or in combination, teaches receiving voice data for mapping command function entries to user input elements. (POR at 40-41.)

Petitioner's Reply strings together various citations from the Petition and then concludes, without explanation that "a POSITA would appreciate that Aginsky in view of Stammler and Hanson teaches this limitation." (Reply at 26-28.)

Notably, Aginsky in view of Stammler and Hanson *is not a ground in the Petition*. (Petition at 6.) Even with Petitioner's improper attempt to cobble together a new obviousness ground, Petitioner still fails to explain how any received voice data is used for mapping anything, let alone mapping command function entries to user input elements as claimed. (Reply at 26-28 (Petitioner merely asserting that command function entries are mapped to user input elements).)

2. Challenged Claims 7, 11, And 19.

Petitioner has failed to show that Challenged Claims 7, 11, and 19 are obvious because:

(i) the prior art does not disclose, teach, or suggest using location data to identify a codeset record that is caused to be provisioned to a controlling device, as claimed; and

(ii) Petitioner has failed to explain how the prior art would be combined to arrive at the claimed invention. (POR at 46-48.)

Petitioner states in its Reply that “Aginsky discloses provisioning the data structure to the remote device, while Dresti teaches use of location data for selecting universal remote control presets.” (Reply at 28.) Petitioner then concludes, without explanation or citation to the record, that “Petitioner demonstrates how Dresti’s teachings would be combined.” (*Id.*)

Petitioner’s argument ignores the Petition and the undisputed evidence. The Petition asserts that “Dresti teaches the general proposition that it was advantageous and well-known for location data to be used when selecting universal remote control codesets,” and then concludes that it would have been obvious to modify Aginsky “to thus include location data.” (Petition at 65.) However, as Petitioner *concedes*, Dresti does *not teach* using location data to select codesets. (Reply at 28.) Rather, Dresti teaches using location data to select remote “presets,” such as language or key

layout. (*Id.*; EX1007 at [0321]; EX2001, ¶¶ 147-148.) Consequently, the entire premise of Petitioner's proposed combination (*i.e.*, that Dresti teaches using location data to select codesets) is indisputably wrong.

3. Challenged Claims 8-10.

Petitioner has failed to show that Challenged Claims 8-10 are obvious. (POR at 41-45.)

Petitioner argues that Patent Owner's arguments "miss[] the point" because "Aginsky teaches that selecting from among codesets by voice command is known" and the "content of the command is non-functional descriptive material that is not entitled to patentable weight." (Reply at 29 (citing Petition at 25, 56-57).)

Petitioner's argument mischaracterizes Aginsky and ignores the language of the claims. The claims expressly require using "voice data indicative of at least a brand of the target appliance to identify within a library of codeset records the codeset record that is caused to be provisioned to the controlling device." (EX1001 at claim 8.) As the Petition notes, Aginsky merely teaches using voice commands to cause remote control functions to be performed. (Petition at 25 (citing EX1004 at 6:2-6, 8:8-12, 9:60-65).) Nothing in Aginsky teaches using a voice command generally, or a voice command indicative of a brand of a target in particular, to identify a codeset record to be provisioned to a controlling device. (*Id.*; EX2001, ¶¶

136-138.) Petitioner's Reply, like the Petition, disregards the language of the claims. (POR at 44.)

4. Challenged Claims 13 And 14.

Petitioner has failed to show that Challenged Claims 13 and 14 are obvious. (POR at 45-46.)

Petitioner simply repeats the Petition's argument that Aginsky discloses downloading "a control application," "thereby meeting the 'instructions are downloaded' limitation." (Reply at 29-30 (citing Petition at 58).)

Petitioner's argument misses the point. The Challenged Claims require that the claimed "instructions" (*i.e.*, the instructions that, when executed by the processing device, cause a codeset record to be provisioned to the controlling device) "are downloaded to the controlling device in a downloadable app." (EX1001 at claims 12-13.) While Petitioner asserts that Aginsky discloses downloading an app to a controlling device (Reply at 29-30; Petition at 58), Petitioner ignores the remainder of the claim language. The Petition ***does not even assert*** that the claimed "instructions" are in Aginsky's downloadable app, much less provide well-reasoned evidence that a POSITA would understand the claimed "instructions" to be in there. (Petition at 58.)

G. Patent Owner's Expert's Testimony Should Be Given Substantial Weight.

Patent Owner's expert provides an in-depth, technical analysis of the asserted prior art references and Petitioner's arguments regarding the same. (*See generally* EX2001.) Thus, *Xerox Corp. v. Bytemark, Inc.* is inapposite. Petitioner's strained assertion regarding Patent Owner's expert's declaration (Reply at 30) is belied by the sheer volume of redlines throughout the comparison document. (*See generally* EX1045.)

IV. CONCLUSION

Patent Owner respectfully requests the Board confirm the patentability of the Challenged Claims of the '083 patent.

Respectfully submitted,

Dated: November 22, 2023

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CERTIFICATE OF COMPLIANCE

This paper complies with the requirements of 37 C.F.R. § 42.24 and contains 5,599 words (exclusive of the table of contents, the table of authorities, the table of exhibits, the certificate of service, and this certification).

This paper complies with the typeface requirements of 37 C.F.R. § 42.6 and has been prepared in 14 point Times New Roman proportionally spaced typeface with normal spacing.

Respectfully submitted,

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