

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

ENTROPIC COMMUNICATIONS, LLC,
Patent Owner.

Case IPR2024-00441
Patent 8,792,008 B2

**AUTHORIZED RESPONSE TO PATENT OWNER'S
REQUEST FOR DIRECTOR REVIEW**

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I. INTRODUCTION

Requests for Director Review of a Board’s final decision are “limited to decisions presenting (a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law.” U.S. Patent & Trademark Office, Director Review Process, <https://www.uspto.gov/patents/ptab/decisions/director-review-process> (last visited Oct. 6, 2025) (describing, in Section 2.B., availability of Director Review for proceedings under part 42 of 37 C.F.R.). None of Patent Owner’s complaints indicate an abuse of discretion, an important issue of law or policy, or an erroneous finding of material fact or conclusion of law that would justify its request. To the contrary, the Board’s analysis addressed all of Patent Owner’s arguments, and provided a reasoned basis to support its finding.

II. THE BOARD ADDRESSED EVERY ISSUE PATENT OWNER RAISED, AND PROVIDED A REASONED BASIS FOR FINDING CLAIMS 1-18 UNPATENTABLE

Patent Owner’s lead argument is that the Final Written Decision (“FWD”) was incomplete, complaining that “[n]owhere in the FWD is there any discussion or findings as to the remainder of claim elements [1C] or [1E], or anything recited in [1A], [1B], or [1D], let alone anything about dependent claims 2, 4-8, 10, 12-16, and 18, or the differences between independent claim 1 and independent claims 3 and 11.” Request, p. 5. The same can be said about Patent Owner’s Response (POR) –

nowhere in the POR is there any discussion or arguments about these very same elements, or any discussion of differences between the independent claims. The Board addressed each and every argument that Patent Owner raised, and the Request does not identify any Patent Owner arguments that were rejected without the Board providing a reasoned basis. Any other arguments are properly deemed waived. *See, e.g.,* Patent Trial and Appeal Board Consolidated Trial Practice Guide, November 2019, p. 94 (“Patent Owner is cautioned that any arguments for patentability not raised in the response may be deemed waived.”); *and In re Nuvasive*, 842 F.3d 1376, 1381 (Fed. Cir. 2016) (finding argument not raised in response was waived). Having failed to prevail on the arguments it put forth for patentability, Patent Owner should not be permitted to complain that the Board did not adequately address arguments that Patent Owner did not bother to make.

A. Setting Aside Whether Patent Owner Waived Challenges to the Unrebutted Arguments in the Petition, the Board’s Analysis as a Whole Shows its Reasoned Basis

Having failed in the arguments it presented at trial, Patent Owner now challenges the Board’s reasoning for agreeing with the remaining unrebutted arguments from the Petition. The Board need not provide a “perfect” explanation, and will be upheld as long as one can “reasonably discern that it followed a proper path.” *Securus Tech. v. Global Tel*Link*, 685 F. App’x 979, 987 (Fed. Cir. 2017) (nonprecedential). In the instant case, the Board provided a fair reasoned basis for

accepting those unrebutted arguments. The examples below show that various examples listed in the Request were substantively addressed when the Board's discussion is viewed as a whole:

Element [1A] simply recites "A system comprising." Ex. 1001, cl. 1. It is apparent from the FWD that the Board found such a system, as it addressed the elements below.

Element [1B] recites "an analog-to-digital converter," and the Petition identified the Konstantinos analog-to-digital (ADC) converter 204 for this element. Petition, pp. 36-37. The Board discussed the Konstantinos ADC throughout pages 11-24, in rejecting Patent Owner's argument regarding the capability of that ADC to be used in the alleged combination. FWD, 11-24. Clearly, the Board properly found that the combination included the claimed ADC of element [1B].

Element [1C] recites "a signal monitor operable to: analyze said digitized signal to determine a characteristic of said digitized signal; and report said determined characteristic to a source of said received signal." Ex. 1001, cl. 1. The Board addressed, and rejected as unconvincing, Patent Owner's argument regarding the analyzing of the digitized signal. FWD, 22-25. As for "report", the Board expressly found that Kamieniecki disclosed "a set-top box that monitors signal quality in downstream and upstream paths and sends related information to a headend ..." FWD, 9.

Element [1D] recites “a data processor operable to process a television channel to recover content carried on the television channel.” Ex. 1001, cl. 1. The Petition argued that both Konstantinos and Kamieniecki disclosed decoders for recovering content from a television channel, and the Board addressed these decoders in addressing Patent Owner’s arguments at pages 20 and 24-25 of the FWD. FWD, 20, 24-25. Clearly, the Board found that the references had the required components to process a television channel and recover its content as recited in element [1D], and Patent Owner never argued that these references could not.

Element [1E] recites a “channelizer” operable to select portions of the digitized signal and “concurrently output” them, and the Board extensively addressed Patent Owner’s arguments about whether the “concurrent output” was shown in the combination, ultimately agreeing that this concurrent output was shown. FWD, 24-25. The Board also found that Konstantinos disclosed the channel selectors, which the Petition cited to show the selection of those “concurrently output” portions. FWD, 10-11; Petition, pp. 41-44.

Dependent claim 2 adds the requirement that “said first portion of said digitized signal spans said entire television spectrum.” Ex. 1001, cl. 2. The Board acknowledged Patent Owner’s assertion that Konstantinos “would receive a downstream signal formatted based on the DOCSIS standard, which requires a

standard 6 MHz bandwidth across the entire downstream spectrum,” and concluded that “[w]e agree with Petitioner that neither reference is limited to the exemplary bandwidths identified, and that one of ordinary skill would have understood that other bandwidths could be used.” FWD, 15-16. While the FWD did not include a section with a “claim 2” heading, it is clear from the FWD’s discussion that a proper path was provided for finding this feature. Dependent claims 4 and 12 recite “wherein said first portion comprises all of said received signals from F_{lo} to F_{hi} .” Ex. 1001, cl. 4, 12. The analysis for this feature is the same as the “entire television spectrum” claim 2 feature.

Dependent claims 5 and 13 recite seven (7) alternative options for the “one or more characteristics” in independent claim 3. Ex. 1001, cl. 5, 13. The Petition identified several of these in the references, including Kamieniecki’s monitoring of signal level as showing “signal power vs. frequency” and “monitoring error count which a POSITA would have understood to include bit error rate and/or symbol error rate.” Petition, pp. 47-48. The Board similarly found that Kamieniecki’s monitor collected “statistics such as channel absence/presence, error count, signal level estimates, and errors/dropouts.” FWD, 10. Again, while not separately labeled, it is apparent why the Board agreed with the unrebutted arguments in the Petition.

Dependent claims 6 and 14 recite that “said received signal is a cable television signal; and said plurality of channels comprise a plurality of television

channels.” Ex. 1001, cl. 6, 14. The Board expressly found that Kamieniecki disclosed a cable system and generating information related to signal quality on the channels,” and that Konstantinos’ receiver received “a cable TV signal with bundled channels,” consistent with the un rebutted argument in the Petition. FWD, 9, 11; Petition, p. 49.

These discussions, and the detailed analysis of the arguments that Patent Owner actually presented, show that the Board provided ample reasoning to support its determination that “[i]n view of the prior art and arguments presented in the Petition, and having found Patent Owner’s arguments unpersuasive, we conclude that Petitioner has shown, by a preponderance of the evidence, that claims 1-18 of the ’008 patent are unpatentable.” FWD, 33.

B. The FWD Did Not “Invent” an Argument – It Simply Addressed and Rejected Patent Owner’s Argument

The Board found that Patent Owner was attacking references individually, without properly considering the combined teachings of the references, and Patent Owner continues that trend here. FWD, 24 (“We agree with Petitioner that Patent Owner’s arguments attack Kamieniecki alone and do not properly consider what the combination of Kamieniecki and Konstantinos would have suggested to the skilled artisan.”). Patent Owner begins by addressing Kamieniecki alone – alleging that the Petition did not “state or suggest that (1) Kamieniecki’s monitor can analyze signals

in the digital domain or (2) that a POSITA would be motivated to modify Kamieniecki's monitor to operate in the digital domain." Request, p. 8.

But the Petition clearly alleged that the Kamieniecki monitor 116 monitors the channels that it receives from its IB and/or OOB tuners and that those channels are digital. Petition, p. 38 ("Kamieniecki describes a monitor 116 (claimed 'signal monitor'), which monitors signal quality of the channels it receives . . . from the IB and/or OOB tuners."), 34 ("Kamieniecki's IB and OOB tuners use the same inputs (an RF signal) and same outputs (digital signal of the desired channel)"). This is after discussing the analog-to-digital converter, which is expressly shown in Konstantinos (and admitted by Patent Owner's expert to be a "typical component in a cable set-top box"). Petition, pp. 36-38; Petitioner's Reply, p. 13, citing Ex. 2013, ¶62. The Petition thus alleged that a result of combining these teachings shows that "the monitor 116 would receive a selected IB and/or OOB channel as a digital output stream from the Konstantinos receiver 200." Petition, p. 39 (emphasis added). The Board thus correctly found that "[t]he Petition stated that Konstantinos's ADC digitizes the received RF signal, and that Kamieniecki's monitor would analyze digital signals from the IB/OOB tuners and determine signal quality information such as error count and signal level estimates." FWD, 24, citing Petition, pp. 36-40 (emphasis added).

Patent Owner admits the Petition alleged this combination, but Patent Owner argues that alleging a monitor “receives” a digital signal is not enough to allege the monitor actually monitors that digital signal. Request, pp. 8-9 (“... *receiving* a digital signal is much different than *being able to process it, ...*”). Again, the Petition alleged that the Kamieniecki monitor, as its name suggests, monitors the digital channels it receives from its IB and OOB tuners, and the Petition quite clearly alleged that the combined teachings showed this monitor also receiving digitized channels from the Konstantinos ADC. Petition, pp. 34, 38-39.

Patent Owner further argues it was improper to require that Patent Owner disprove a motivation to modify Kamieniecki’s monitor. Request, p. 9. But it is Patent Owner, not Petitioner, who alleged that such modification was required.¹ As discussed above, the Petition set forth that the Kamieniecki monitor receives digital signals for monitoring and that it would continue to do so in combination with Konstantinos. Patent Owner, in its Patent Owner Response (POR), raised the argument that the Kamieniecki monitor was limited to monitoring analog signals

¹ Elsewhere in the Petition, Petitioner does explain that Kamieniecki’s monitor could be modified based on Konstantinos’ information extraction processor to monitor additional signal characteristics. Petition, pp. 48-49. Patent Owner never attempted to rebut this argument.

only, and that “extensive modification” would be needed for it to process digital signals. POR, p. 40. Petitioner rebutted this point in its Reply. Petitioner’s Reply, pp. 12-13. The Board addressed these arguments at pages 22-24 of the FWD, noting Petitioner’s arguments that: 1) Kamieniecki states that even a basic STB received digital streams; and 2) Patent Owner’s own expert agreed that an ADC [analog-to-digital converter] was a “typical component of an STB” and that ‘[t]here would have to be analog to digital conversion in there somewhere’ if an STB is to output an MPEG stream for viewing, as Kamieniecki teaches.” FWD, 23. After addressing these arguments, the Board indicated its agreement with Petitioner, and concluded with the note that “Patent Owner does not explain why it would have been beyond the level of ordinary skill to modify Kamieniecki’s monitor to operate in the digital, rather than analog, domain to analyze the signal quality, as the Petition suggests.” FWD, 24. This was not placing a burden on Patent Owner to justify a modification alleged by Petitioner or needed for the combination. This was placing a burden on Patent Owner to defend its own argument.

III. PATENT OWNER OVERLOOKS CLAIM DETAILS IN ARGUING FOR ITS “CONFLICT” WITH ANOTHER IPR FINDING

Patent Owner argues that the Board’s treatment of dependent claims 5 and 13 is allegedly in conflict with the decision in IPR2024-00442 (’442 FWD), which addressed U.S. Patent No. 9,825,826 (’826 patent). Request, pp. 9-12. Patent Owner focuses on just the language of the dependent claims, comparing for example

dependent claim 5 of the '008 patent with dependent claim 6 of the '826 patent, both of which recite the phrase “signal power vs. frequency,” to expect that the claims of different patents should stand or fall together. *Id.* But there are several problems with Patent Owner’s argument.

First, Patent Owner ignores the fact that the independent claims in the '008 and '826 patents are different, and that the independent claim in the '826 patent included an additional requirement that was not required by claim 5 of the '008 patent, and which factored in to the Board’s reasoning for finding claim 6 of the '826 patent to not have been shown unpatentable. Specifically, claim 6 of the '826 patent depends from claim 1, which recites “controlling the transmission of network management messages back to said headend based on said measured characteristic of said received signal, wherein said measured characteristic is different than said network management messages.” *See, e.g.,* '442 FWD, 35-36. When the Board in the '442 FWD found this claim to be not unpatentable, the Board explicitly relied on '826 patent claim language that is not found in '008 patent’s claim 5: “[w]e agree with Patent Owner (PO Resp., 42) that controlling transmission of network management messages to the headend based on ‘channel absence/presence’ or ‘signal level estimates’ is not equivalent to reporting ‘signal power vs. frequency.’” '442 FWD, 43. This “network management message” limitation was part of why the Board reached its conclusion in the '442 FWD, but that limitation is not present

in claims 5 and 13 at issue here, so it is improper for the Patent Owner to have expected that these claims would stand or fall together with those of the '826 patent.

Second, Petitioner has requested rehearing in the '826 IPR, specifically addressing the Board's conclusion regarding claim 6, so it is premature to assume that the conclusion regarding claim 6 is final.

Third, Patent Owner does not argue the substance in the Request, and does not dispute the evidence supporting the Board's conclusion perhaps because it already waived these arguments by not making them in its Patent Owner Response. Claims 5 and 13 recite seven (7) alternative types of the claimed "one or more characteristics," any one of which would have been sufficient for meeting the claim. Ex. 1001, cl. 5 ("The method of claim 3, wherein said one or more characteristics is one of: signal power vs. frequency, phase vs. frequency, signal-to-noise ratio, peak-to-average ratio, noise levels, bit error rate, and symbol error rate.")). In addressing claim 5, the Petition argued several ways in which this claim is met. The Petition argued, *inter alia*, that Kamieniecki's "signal level" and "channel absence/presence" rendered obvious the "signal power vs. frequency," and that its error count would have been understood "to include bit error rate and/or symbol error rate." Petition, pp. 47-48.

The Board agreed that Kamieniecki disclosed monitoring to determine various characteristics, stating that Kamieniecki's "[m]onitor 116 may perform monitoring

at periodic intervals, or idle times, and tunes to each channel in its channel map to collect statistics such as channel absence/presence, error count, signal level estimates, and errors/dropouts, ...” FWD, 10. This supports its conclusion that “[i]n view of the prior art and arguments presented in the Petition, and having found Patent Owner’s arguments unpersuasive, we conclude that Petitioner has shown, by a preponderance of the evidence, that claims 1-18 of the ’008 patent are unpatentable.” FWD, 33.

Finally, Patent Owner did not dispute, or even address, the Petition’s arguments regarding claims 5 and 13 anywhere in the Patent Owner Response or Patent Owner Surreply, so its complaint that the Board erred cannot be separated from its own choice of arguments to present.

IV. THERE WAS NO POST-INSTITUTION “REWRITING” OF THE CHALLENGE

The Board correctly rejected Patent Owner’s contention that the Petition’s obviousness argument was somehow limited to a “physical substitution” theory that required a higher level of detail. FWD, 15 (“We do not agree with Patent Owner that Petitioner’s argument presents a ‘physical substitution’ (*see* PO Resp. 18) that requires some higher level of detail.”); *see also In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012) (“[i]t is well-established that a determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements.”). When the Board disagreed with Patent Owner on this

issue, the Board was not “rewriting” the Petition’s arguments – it was rejecting Patent Owner’s characterization of those arguments.

And the Board did so for good reason. The Board understood the Petition’s combination to be referring to a combination of the concepts disclosed in the references. FWD, 15 (“We understand Petitioner’s assertion ... to simply suggest a combination of the concepts disclosed in the references.”). While the Petition did in places make a shorthand reference to “replacing” the Kamieniecki tuners, in setting forth the combination the Petition was clear it was applying a combination of the prior art teachings, explicitly stating that “[a] POSITA would have been motivated to apply Konstantinos’ *teaching* of a multi-channel receiver to the monitoring STB of Kamieniecki ...” and “[a] POSITA would have had the skill to implement Konstantinos’ *teachings* in the system of Kamieniecki” Petition, p. 34 (emphasis added).

Patent Owner refers to the deposition testimony of Petitioner’s Expert, Mr. David Lett, in which he referred to “replacement” while answering Patent Owner’s questions, but nowhere did Mr. Lett limit the obviousness combination to the sort of “physical substitution” that Patent Owner envisions. Request, p. 13. Indeed, Mr. Lett’s Declaration clearly acknowledged that obviousness referred to whether “it would have been obvious to one of ordinary skill in the art to combine the *teachings* of the prior art to yield the patent claim,” and he stated that “[a] POSITA would have

had the skill to implement Konstantinos’ *teachings* in the system of Kamieniecki because Kamieniecki’s IB and OOB tuners use the same inputs ...”). Ex. 1002, ¶¶22, 127 (emphasis added). He, like the Petition, combined the teachings of the references, and the Board was not “rewriting” the challenge when it applied that combination.

V. TERMINATION IS UNWARRANTED

Director Review is unwarranted, but even if such review is granted, there is no basis for the extraordinary relief of termination that Patent Owner demands. Patent Owner cites an Order in *Interactive Comms. Int’l, Inc.*, IPR2024-00465, Paper 39 (P.T.A.B. Oct. 1, 2025), but that decision rested on a finding that the testimony of petitioner’s expert was deemed too contradictory and unreliable to proceed. *Id.*, p. 4 (“Having determined that Mr. Hutton is not credible as to multiple material aspects of his testimony, it would be inappropriate in this instance to rely on this testimony for the other grounds. ... For this reason, the proceeding is terminated.”)². No such finding regarding Petitioner’s expert has been made here.

² Paper 39 was subsequently superceded by Paper 40, which was a revised order that changed the disposition from “reversed” to “vacated.” *Interactive Comms. Int’l, Inc.*, IPR2024-00465, Paper 40 (P.T.A.B. Oct. 9, 2025).

That case is inapposite to the issues raised in the Request. Indeed, in the Federal Circuit cases cited by Patent Owner regarding the sufficiency of the Board's explanation, the proceedings were not terminated – they were remanded for the Board to clarify its findings. *See, e.g., Securus Techs., Inc.*, 685 F.App'x at 987, 990 (remanded); *Paice LLC v. Ford Motor Co.*, 881 F.3d 894, 911 (Fed. Cir. 2018) (remanded); *In re Nuvasive*, 842 F.3d at 1384-85 (remanded). To the extent review is granted, it would be fundamentally unjust to terminate the proceedings, as Petitioner has no role in preparing the FWD.

VI. CONCLUSION

For the reasons above, Patent Owner has failed to identify (a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law. The Request for Director Review should be denied.

Dated: October 14, 2025

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e)(4), the undersigned hereby certifies that the foregoing PETITIONER'S AUTHORIZED RESPONSE TO PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW was served electronically via e-mail on October 14, 2025 on the following counsel of record for Patent Owner:

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