

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

ROKU, INC.,
Appellant

v.

**UNIVERSAL ELECTRONICS, INC., GEMSTAR
TECHNOLOGY (QINZHOU) CO. LTD., GEMSTAR
TECHNOLOGY (YANGZHOU) CO. LTD., C.G.
DEVELOPMENT LTD., UNIVERSAL
ELECTRONICS BV, CG MEXICO REMOTE
CONTROLS, S. DE R.L. DE C.V., UEI BRASIL
CONTROLES REMOTOS LTDA,**
Cross-Appellants

2024-1188, 2024-1241

Appeals from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No.
IPR2022-00818.

Decided: June 17, 2025

JONATHAN DANIEL BAKER, Dickinson Wright PLLC,
Mountain View, CA, argued for appellant. Also repre-
sented by DINO HADZIBEGOVIC, MARK HOWARD ROGGE;
CRAIG Y. ALLISON, Nashville, TN; RICHARD CRUDO, LESTIN

L. KENTON, JR., Sterne Kessler Goldstein & Fox PLLC, Washington, DC.

THOMAS WILLIAM DAVISON, Alston & Bird LLP, Washington, DC, argued for cross-appellants. Also represented by KIRK T. BRADLEY, NICHOLAS CHRISTOPHER MARAIS, SCOTT BENJAMIN PLEUNE, Charlotte, NC; NICHOLAS TANG TSUI, Atlanta, GA.

Before LOURIE, DYK, and CUNNINGHAM, *Circuit Judges*.

LOURIE, *Circuit Judge*.

Roku, Inc. owns U.S. Patent 8,378,875 (“the ’875 patent”), which is directed to methods of programming a universal remote control. Universal Electronics, Inc., Gemstar Technology (Qinzhou) Co. Ltd., Gemstar Technology (Yangzhou) Co. Ltd., C.G. Development Ltd., Universal Electronics BV, CG México Remote Controls, S. de R.L. de C.V., and UEI Brasil Controles Remotos Ltda. (collectively, “UEI”) petitioned for *inter partes* review of the ’875 patent, arguing that claims 1–5, 8–10, and 14 would have been obvious over the Radio Shack Phone Up 4 Remote Control Owner’s Manual (“RadioShack”) and that claim 11 would have been obvious over International Patent Application Publication 2003/083801 (“Wouters”) and International Patent Application Publication 2000/070577 (“Verzulli”).

The Board instituted review of all challenged claims and concluded that: (1) UEI had shown, by a preponderance of the evidence, that RadioShack was publicly accessible prior to the ’875 patent’s critical date and was therefore available as prior art; (2) UEI had shown that dependent claims 1–5, 8–10, and 14 would have been obvious over RadioShack; and (3) UEI had not shown that independent claim 11 would have been obvious over Wouters and Verzulli. *Universal Elecs., Inc. v. Roku, Inc.*, No. IPR2022-00818, 2023 WL 6976666 (P.T.A.B. Oct. 23, 2023)

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(“*Decision*”). Roku timely appealed, and UEI timely cross-appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

For the following reasons, we *affirm-in-part, vacate-in-part*, and *remand*.

DISCUSSION

We review the Board’s legal conclusions *de novo* and its factual findings for substantial evidence. *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 769 (Fed. Cir. 2018). A finding is supported by substantial evidence if a reasonable mind might accept the evidence as adequate to support the finding. *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938).

I

We begin with Roku’s appeal. Roku argues that the Board erred in its determination that RadioShack was publicly accessible prior to the critical date of the ’875 patent, and therefore a printed publication available as prior art under 35 U.S.C. § 102. Roku further argues that the Board’s constructions of various terms in each of dependent claims 2, 4, 8, and 10 were erroneous. We address those arguments in turn.

A. Public Accessibility of RadioShack

“Whether a reference qualifies as a printed publication under § 102 is a legal conclusion based on underlying fact findings.” *Acceleration Bay*, 908 F.3d at 772 (citations omitted). One such fact finding is the public accessibility of the reference. *Id.* “A reference is considered publicly accessible if it was ‘disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.’” *Id.* (quoting *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347, 1355 (Fed. Cir. 2018)).

In its final written decision, the Board concluded that UEI had shown, by a preponderance of the evidence, that RadioShack was publicly accessible before the critical date of the '875 patent and therefore that it was available as prior art. *See Decision*, at *14. The Board reached that conclusion in a three-step inquiry.

First, the Board found that a person of ordinary skill in the art could have reasonably found the website hosting RadioShack, RemoteCentral.com, which was founded in 1998 and grew to be “the internet’s preeminent source for universal remote control information.” *Id.* at *9 (quoting J.A. 1862); *see id.* at *11. That finding, which Roku does not dispute, *see Oral Arg.* at 1:06–1:11, *available at* https://oralarguments.cafc.uscourts.gov/default.aspx?fl=24-1188_05082025.mp3 (“[W]e’re not disputing that the website was known.”), was supported by substantial evidence. The website had been cited in various news publications, including the New York Times, USA Today, Wall Street Journal, and Kiplinger’s, as well as in at least a dozen U.S. patents prior to the '875 patent’s critical date. *Decision*, at *11.

Second, the Board found that, upon arriving at RemoteCentral.com, a person of ordinary skill in the art could have reasonably located RadioShack on that website. Again, that finding was supported by substantial evidence. Specifically, the Board found that RemoteCentral.com’s Universal Remote Control Manuals index page was organized by brand and that, at the time RadioShack was posted, there were 28 brands from which the public could select. *Id.* at *12; *see* J.A. 2896. Within the “Radio Shack” brand, there were 40 specific manuals, with a link to RadioShack being the third entry on the first page. *Decision*, at *12; J.A. 2896.

Third, the Board concluded that UEI “present[ed] specific, uncontroverted evidence that a person of ordinary skill in the art could have easily navigated to the index for

universal remote-control manuals on RemoteCentral.com, and that the number of manuals on the site at the relevant time was relatively modest.” *Decision*, at *13. Because those findings were supported by substantial evidence, we agree that RadioShack is available as prior art under § 102.

Roku nevertheless argues that the Board’s conclusion constituted legal error because it is an undisputed fact that RemoteCentral.com’s Universal Remote Control Manuals page “contained several hundred user manuals” and was not searchable by full text or subject matter keywords. Roku Br. 27–28. Analogizing to *Acceleration Bay*, Roku argues that our precedent indicates that a reference is not publicly accessible when a person of ordinary skill in the art would have to “look through hundreds of documents to find it, unaided by any subject matter indexing or subject matter keyword search capabilities.” *Id.* at 28; *see id.* at 32–34. As Roku’s argument goes, because it is undisputed that RemoteCentral.com did not have subject matter or keyword searching, a person of ordinary skill could not have found RadioShack without *a priori* knowledge of its contents. We disagree.

The “several hundred user manuals” Roku refers to as being hosted on RemoteCentral.com were all located on the website’s “Universal Remote Control Manuals” page. Those documents were therefore sorted by subject matter—universal remote controls—the same subject matter as the invention. Given that Roku does not dispute that a person of ordinary skill in the art could have arrived at RemoteCentral.com and presents no argument that the person of ordinary skill in the art could not have navigated, using reasonable diligence, to the “Universal Remote Control Manuals” page on that website, Roku’s argument boils down to the 329 manuals posted on that page (all of which relate to the subject matter of the invention but are not further categorized or searchable by functionality) being simply too many for any one of them to be publicly accessible. *See Oral Arg.* at 12:10–12:23 (Roku’s counsel arguing

that “if there’s a very small number of documents, then I don’t think there would need to be some search aid” (cleaned up)). Roku’s argument demands more of the public-accessibility inquiry than is required.

In *Acceleration Bay*, on which Roku heavily relies, the asserted reference, Lin, had been uploaded to a university library’s website and assigned a “unique identifier . . . based on the year it was uploaded and the relative order it was uploaded in comparison to other papers.” 908 F.3d at 773 (citation omitted). The Board determined, and we affirmed, that Lin was not publicly accessible because the website “allowed a user to view a list of technical reports indexed only by author or year and that there was no evidence as to how many reports were in the Library’s database.” *Id.* That is, in *Acceleration Bay*, the reasonably diligent person of ordinary skill in the art would have had to “skim[] through potentially hundreds of titles in the same year, *with most containing unrelated subject matter*,” with no reliable way to search keywords for author, title, or abstract fields. *Id.* (emphasis added) (citation omitted). The same was true in *Samsung Elecs. Co. v. Infobridge Ptd. Ltd.*, 929 F.3d 1363, 1367, 1370–73 (Fed. Cir. 2019), where we affirmed the Board’s decision that a reference posted on a website organized only in a hierarchical manner and not by subject matter was not publicly accessible. But this case is unlike *Acceleration Bay* and *Samsung*. Here, the “several hundred user manuals” Roku points to here were all organized based on subject matter—universal remote control user manuals. Thus, a person of ordinary skill in the art, exercising reasonable diligence, would have found RadioShack without the need of any further search aid.

We therefore conclude that the Board did not legally err in determining that RadioShack was available as prior art to the ’875 patent.

B. Dependent Claims

Roku further challenges the Board's claim constructions with respect to dependent claims 2, 4, 8, and 10. To understand Roku's arguments, we provide the relevant portion of independent claim 1, from which each of those claims depends, and address Roku's arguments as to each in turn.

1. A method for setting up a Remote Control that includes a keyboard, a processor, a memory, and a transmitter, the method comprising the steps of:

[a] entering, via the keyboard and processor, a configuration mode;

[b] accepting, via the keyboard and processor, an identifier-entry; and

[c] scanning, via the processor and memory, through remote control code-sets in a database stored in the memory of the Remote Control, wherein the step of scanning comprises:

[c(1)] in case that the identifier-entry is a brand-identifier that identifies a brand, (i) *iterating, via the processor and memory, through the remote control code-sets corresponding to the brand* and (ii) *testing* said remote control code-sets by sending, via the transmitter, to a Consumer Electronic device for a given iteration, one or more specific control code functions of a corresponding remote control code-set

'875 patent, col. 9 ll. 24–42 (emphases and limitation designations added). Before the Board, Roku conceded that

claim 1 does not exclude user input during the “scanning” and “iterating” steps. *Decision*, at *6.

1. Dependent Claim 2

Roku argues that the Board erroneously construed claim 2 in a way that contradicts its plain language and the specification. Dependent claim 2 recites:

2. The method according to claim 1, wherein *the iteration* through remote control code-sets corresponding to the brand *continues* (i) *until a user approval* of a remote control code-set is entered, via the keyboard, or (ii) *until all the remote control code-sets corresponding to the brand have been tested*.

’875 patent, col. 9 ll. 51–55 (emphases added). Roku argues that the Board erred in concluding that the “iteration . . . continues until” language does not preclude user input during the claimed iterating step. *See Decision*, at *15. Specifically, Roku argues that, even though the iterating step of claim 1 does not preclude user input, claim 2 recites additional limitations to further narrow that step, to the exclusion of user input. *See Roku Br.* 42–43. We disagree.

Nothing in the plain language of claim 2 precludes user input during the iteration. Roku’s proposed construction relies on the assumption that *any* user input during the iteration necessarily triggers an end to the iteration. *See id.* at 41 (“The Board’s construction which allows the iteration to stop before one of [the claimed] conditions is met directly contradicts the plain meaning of the claim language.”). But we see no reason, and Roku provides none, that that must be the case. As the Board explained, UEI’s “more straightforward position that the iteration simply continues until the user *indicates approval* is more consistent with the intrinsic evidence and is supported by [expert] testimony.” *Decision*, at *16 (emphasis added); *see also UEI Br.* 50–51.

We therefore see no error in the Board's construction of claim 2. Roku does not otherwise challenge the Board's determination that RadioShack would have rendered obvious claim 2.

2. Dependent Claim 4

Next, Roku argues that the Board erroneously construed claim 4. Dependent claim 4 recites:

4. The method according to claim 1, wherein *the step of testing* a remote control code-set comprises the following steps:

[a] sending, via the transmitter, a remote control signal of the remote control code-set;

[b] checking, via the processor, memory, and keyboard, for a user reaction; and

[c] *in case of a user reaction, enabling*, via the processor, memory, and transmitter, *to test keys of the Remote Control* for the remote control code-set.

'875 patent, col. 9 l. 61–col. 10 l.3 (emphases and limitation designations added). Roku argues that the Board erred by concluding that the claimed “additional testing,” as recited in limitation 4[c], need not be a part of the iterative testing loop of claim 1. Roku Br. 49. It argues that “the language of claims 1 and 4 imposes a structural relationship between the iterative testing loop of claim 1 and the additional testing in claim 4.” We disagree.

The step of “iterating” is wholly distinct from the step of “testing” in claim 1. And claim 4 further limits the “testing” step of claim 1. We therefore disagree that limitation 4[c] must be part of the “iterating” step of claim 1. The Board therefore did not err in its construction of claim 4. Roku does not otherwise challenge the Board's

determination that RadioShack would have rendered obvious claim 4.

3. Dependent Claim 8

Roku next challenges the Board's construction of claim 8. That claim recites:

8. The method according to claim 1, wherein a *numbering convention* is used to distinguish between brand-identifiers and code-set-identifiers.

'875 patent, col. 10 ll. 16–18 (emphasis added). Roku argues that a “numbering convention” necessarily refers to the way identifiers themselves are numbered, such as all brand-identifiers beginning with an 8 or 9. Roku Br. 51–52. Again, we disagree.

As the Board explained, “the claim does not require that the recited ‘numbering convention’ be embodied by the identifiers themselves.” *Decision*, at *18. Roku's proposed construction too narrowly reads the term “convention” and attempts to import particular embodiments into the claim language absent any evidence that the patentee intended the claims to be so limited. *See Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (“While we read claims in view of the specification, of which they are a part, we do not read limitations from the embodiments in the specification into the claims.”). The Board therefore did not err in its construction of dependent claim 8. Roku does not otherwise challenge the Board's determination that RadioShack would have rendered obvious claim 8.

4. Dependent Claim 10

Finally, Roku challenges the Board's construction of the term “processor” in claim 10. Dependent claim 10 recites:

10. A non-transitory computer-readable medium embodied with a computer program that comprises

computer program code *executable by a processor* to perform the steps of setting up a Remote Control of claim 1.

'875 patent, col. 10 ll. 24–27 (emphasis added). Roku argues that the Board erred in construing the claim to allow a user to perform the claimed steps. Roku Br. 55. That is, Roku again attempts to limit the claim to exclude user input. We again disagree with Roku's overly narrow claim construction.

As the Board aptly explained, “[i]t is apparent that the processor [in claim 10] alone is incapable of performing all of ‘the steps of setting up a Remote Control of claim 1.’” *Decision*, at *19. Claim 1 requires, in addition to the processor, a keyboard and a memory, and nothing in the intrinsic record suggests that the processor can perform all of the claimed steps without any user input. Accordingly, we see no error in the Board's construction. Roku does not otherwise challenge the Board's conclusion that RadioShack would have rendered obvious claim 10.

* * *

For the foregoing reasons, we affirm the Board's determination that claims 1–5, 8–10, and 14 of the '875 patent are unpatentable as obvious over RadioShack.¹

II

We now turn to UEI's cross-appeal. UEI argues that the Board's determination that UEI did not show that the combination of Wouters and Verzulli would have rendered

¹ Roku does not challenge the Board's unpatentability determinations with respect to claims 1, 3, 5, 9, and 14 assuming that RadioShack is prior art. Thus, because we agree that RadioShack was publicly accessible, the Board's obviousness determinations as to those claims must be affirmed.

claim 11 obvious was not supported by substantial evidence. Claim 11 recites, in relevant part:

11. A method for setting up a Remote Control that includes a keyboard, a processor, a memory, and a transmitter, the method comprising the steps of:

...

combining, via the processor and memory, correct working codes from the scanned remote control code-sets into a new custom configuration code set and installing, via the processor and memory, the combined correct working codes of the new custom configuration code set for use by the remote control.

'875 patent, col. 10 ll. 28–48. On appeal, UEI argues that the Board improperly overlooked the “reinstallation” functionality of Wouters’s “fixer,” which can be used to reinstall a custom code set when the remote control malfunctions (*e.g.*, when its batteries die). UEI Br. 67–68. That functionality, UEI argues, would have rendered claim 11 obvious.

We agree with UEI to the extent that the Board’s decision is silent with respect to Wouters’s reinstallation functionality. However, the four lines of Wouters on which UEI relies for that functionality were never quoted or discussed in UEI’s petition. *Compare* J.A. 249–50 (UEI’s petition quoting Wouters, col. 10 ll. 14–20), *with* UEI Br. 67 (relying on Wouters, col. 10 ll. 20–24). That being said, UEI did appear to expound upon that functionality at the oral hearing before the Board, to which Roku did not object. *See* J.A. 836 (UEI arguing that “[w]hen the remote control malfunctions, . . . the user may easily reinstall the chosen code set”); *see also* J.A. 556 (UEI arguing in its reply brief that “Wouters clearly discloses that the chosen codeset is the active codeset, and that if the remote control ever

malfunctions *the codeset can be installed again*” (emphasis added)). Indeed, Roku appears to have addressed that argument on the merits in its oral-hearing rebuttal. *See* J.A. 863–64.

Ordinarily, arguments not presented to the Board are forfeited. *In re Google Tech. Holdings LLC*, 980 F.3d 858, 863 (Fed. Cir. 2020); *Netflix, Inc. v. DivX, LLC*, 84 F.4th 1371, 1377 (“[T]he Board should [] not have to decode a petition to locate additional arguments beyond the ones clearly made.”). The problem here is that we are unable to determine from the decision before us whether the Board entirely overlooked UEI’s reinstallation argument, whether the Board considered and rejected that argument on the merits, or whether the Board deemed that argument forfeited as untimely presented. The Board’s silence with respect to that argument precludes judicial review. *Timken U.S. Corp. v. United States*, 421 F.3d 1350, 1355 (Fed. Cir. 2005) (“[I]t is well settled that an agency must explain its action with sufficient clarity to permit ‘effective judicial review.’” (quoting *Camp v. Pitts*, 411 U.S. 138, 142–43 (1973))).

For that reason, we vacate the Board’s decision with respect to claim 11 and remand for the Board to provide a more thorough explanation regarding its treatment of UEI’s reinstallation argument based on Wouters.

CONCLUSION

We have considered the parties’ remaining arguments and find them unpersuasive. For the reasons provided, we affirm the Board’s decision holding unpatentable claims 1–5, 8–10, and 14 of the ’875 patent as obvious over Radioshack. We vacate the decision holding that claim 11 was not shown to be unpatentable over Wouters and Verzulli, and remand to the Board for reconsideration of that claim in light of this opinion.

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**AFFIRMED-IN-PART, VACATED-IN-PART, AND
REMANDED**

COSTS

The parties shall bear their own costs.