

No. 24-1097

---

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

---

GOOGLE LLC,

*Plaintiff-Appellee,*

*v.*

SONOS, INC.,

*Defendant-Appellant.*

---

On Appeal from the United States District Court for the  
Northern District of California  
Nos. 3:20-cv-06754-WHA and 3:21-cv-07559-WHA, Hon. William Alsup

---

**REPLY BRIEF OF APPELLANT SONOS, INC.**

---

George I. Lee  
Sean M. Sullivan  
Rory P. Shea  
J. Dan Smith  
Cole B. Richter  
LEE SULLIVAN SHEA & SMITH LLP  
656 W. Randolph St., Floor 5W  
Chicago, IL 60661

Clement S. Roberts  
Elizabeth R. Moulton  
Sachi Schuricht  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
405 Howard Street  
San Francisco, CA 94105

E. Joshua Rosenkranz  
Joseph R. Kolker  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
51 West 52nd Street  
New York, NY 10019  
(212) 506-5000

Alyssa Caridis  
Nicholas González  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
355 S. Grand Avenue, Suite 2700  
Los Angeles, CA 90071

Lauren A. Weber  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
401 Union Street, Suite 3300  
Seattle, WA 98101

*Counsel for Appellant*

## TABLE OF CONTENTS

	<b>Page</b>
TABLE OF AUTHORITIES.....	ii
INTRODUCTION.....	1
ARGUMENT .....	3
I.    The District Court Abused Its Discretion In Applying Prosecution Laches. ....	3
A.    Prosecution laches does not apply because Sonos did not extend its patents’ terms. ....	3
B.    Sonos did not unreasonably delay prosecution. ....	6
C.    Google suffered no prejudice. ....	11
II.   The District Court Erred In Granting JMOL On The Zone-Scene Patents’ Priority Date. ....	14
A.    Sonos disclosed overlapping zone scenes no later than the 2007 non-provisional. ....	14
B.    Google did not prove that Sonos added new matter to the specification in 2019. ....	23
C.    The procedural irregularities and Google’s forfeitures justify reversal. ....	30
III.  The District Court Wrongly Invalidated The Direct- Control Patents. ....	35
A.    Sonos raised a material factual dispute over the device-picker. ....	35
B.    Sonos raised a material factual dispute over the remote-playback-queue limitations. ....	38
CONCLUSION.....	40
CERTIFICATE OF COMPLIANCE	

**TABLE OF AUTHORITIES**

	<b>Page(s)</b>
<b>Cases</b>	
<i>In re Bogese</i> , 303 F.3d 1362 (Fed. Cir. 2002) .....	5, 9, 10
<i>Cancer Rsch. Tech. Ltd. v. Barr Lab’ys, Inc.</i> , 625 F.3d 724 (Fed. Cir. 2010) .....	13
<i>In re Clean Water Act Rulemaking</i> , 60 F.4th 583 (9th Cir. 2023) .....	4
<i>Cordis Corp. v. Medtronic AVE, Inc.</i> , 339 F.3d 1352 (Fed. Cir. 2003) .....	15, 20
<i>EcoFactor, Inc. v. Google LLC</i> , 104 F.4th 243 (Fed. Cir. 2024).....	32
<i>Hyatt v. Hirshfeld</i> , 998 F.3d 1347 (Fed. Cir. 2021) .....	5, 7, 13
<i>Hylete LLC v. Hybrid Athletics, LLC</i> , 931 F.3d 1170 (Fed. Cir. 2019) .....	38
<i>Med. Instrumentation &amp; Diagnostics Corp. v. Elekta AB</i> , 344 F.3d 1205 (Fed. Cir. 2003) .....	37
<i>Personalized Media Commc’ns, LLC v. Apple Inc.</i> , 57 F.4th 1346 (Fed. Cir. 2023).....	5, 12
<i>Solomon Techs. v. ITC</i> , 524 F.3d 1310 (Fed. Cir. 2008) .....	35
<i>Symbol Techs., Inc. v. Lemelson Med., Educ. &amp; Rsch. Found.</i> , 277 F.3d 1361 (Fed. Cir. 2002) .....	5
<i>Symbol Techs., Inc. v. Lemelson Med., Educ. &amp; Rsch. Found.</i> , 422 F.3d 1378 (Fed. Cir. 2005) .....	6

<i>Teutscher v. Woodson</i> , 835 F.3d 936 (9th Cir. 2016).....	10
<i>TriMed, Inc. v. Stryker Corp.</i> , 608 F.3d 1333 (Fed. Cir. 2010) .....	39
<i>United States v. Hernandez-Estrada</i> , 749 F.3d 1154 (9th Cir. 2014) .....	36
<i>Webster Elec. Co. v. Splitdorf Elec. Co.</i> , 264 U.S. 463 (1924).....	3, 4
<i>Woodbridge v. United States</i> , 263 U.S. 50 (1923).....	3
<b>Statutes</b>	
35 U.S.C. § 112 .....	4
35 U.S.C. § 120 .....	4
35 U.S.C. § 251(d).....	4
<b>Rules and Regulations</b>	
Fed. R. Civ. P. 50.....	34

## INTRODUCTION

Nothing in Google's brief changes the stark reality that the opinion below throwing out the jury's verdict was unprecedented, legally wrong, and unmoored from any semblance of proper procedure.

On prosecution laches, Google cannot defeat two separate grounds for reversal. First, it does not dispute that no case has ever applied prosecution laches where a patentee did not improperly extend their patent term, and it offers no persuasive reason to break new ground. Second, Google does not dispute that the doctrine is limited to abuses of the patent system and that applying it here endangers tens of thousands of properly obtained patents, but Google fails to explain how the routine continuation practice here was either egregious or prejudicial.

On new matter, written description, and the connected issues of priority date and anticipation, everyone agrees that Sonos described zone scenes—including overlapping ones—in 2005. Yet Google insists that Sonos did not disclose that invention in the applications Sonos filed in 2006 and 2007. It is obvious why Google decided not to advance that argument before trial. First, Google simply cannot explain away the

multiple disclosures in the specification that individually and together describe overlapping zone scenes. Second, the argument is based on the demonstrably false contention that Sonos fundamentally changed the meaning of one sentence from the 2006 provisional by subtly changing its “context” in 2019. Either basis requires outright reversal. But at a minimum Sonos was entitled to try these issues to a jury, and not just brief them to a judge.

Google scarcely defends the procedure the district court followed. No rule allows a court to identify fact-intensive, non-equitable defenses in the middle of trial and then resolve them itself after a trial where no one litigated those issues, while refusing to accept any new evidence on them. Because Google forfeited these issues many times over, this Court should reverse outright on this basis alone, but at a minimum order a new trial following proper procedures.

This Court should also vacate the judgment for the direct-control patents and order a trial.

## ARGUMENT

### I. The District Court Abused Its Discretion In Applying Prosecution Laches.

This Court should reverse the laches ruling, whether because laches cannot apply without an undue patent-term extension, § I.A, or because, even if it could, this case presents neither the misconduct nor the prejudice necessary to justify laches, §§ I.B-C.

#### A. Prosecution laches does not apply because Sonos did not extend its patents' terms.

Google does not dispute that no court has previously applied prosecution laches unless the patentee's actions extended its monopoly period, which Sonos did not do. Opening Brief (OB) 27. Google also does not deny that the Supreme Court has *said* that the doctrine's motivating feature is punishing patentees who "unduly ... postpone the time when the public [can] enjoy the free use of the invention." *Woodbridge v. United States*, 263 U.S. 50, 60 (1923). Yet Google suggests that this common feature is but a coincidence, and the cases would have come out the same way even without the term extension. Response Brief (RB) 48-51.

Google's main example is *Webster Electric Co. v. Splitdorf Electrical Co.*, 264 U.S. 463 (1924). Google does not deny that *Webster*

emphasized it was punishing the patentee for conduct that secured an “undue extension of the patent monopoly.” *Id.* at 466. But Google asserts that *Webster* turned on the improper “enlargement of *scope* [of *claims*], not duration” of patent terms. RB50. That is wrong. *Webster* held that the patentee should have filed the broader claims with an earlier-issued patent in the same family precisely *because* that would have resulted in an earlier expiration date and earlier public enjoyment of the invention. 264 U.S. at 465-67. In any event, Google’s (and its amici’s) focus on the time limits for broadening reissues is inapt here: Sonos indisputably *did not* broaden its claims, but narrowed them.

Congress has already told the courts and the Patent Office how to police claim scope and continuation practice. *See* 35 U.S.C. §§ 112, 120, 251(d). Applying prosecution laches here would upset the statutory balance Congress struck, thus violating the basic principle that equitable doctrines cannot displace Congress’s carefully defined statutory remedies. *E.g., In re Clean Water Act Rulemaking*, 60 F.4th 583, 594 (9th Cir. 2023).

Google similarly fails in its effort to cast *Symbol I* and *Bogese* as “animated” by “[d]elay concerns” without regard to term extensions.



RB48-50. In *Symbol I*, this Court confirmed the availability of prosecution laches where the misconduct resulted in a term extension, without ever suggesting that the term extension was irrelevant. *Symbol Techs., Inc. v. Lemelson Med., Educ. & Rsch. Found.*, 277 F.3d 1361, 1363 (Fed. Cir. 2002). *In re Bogese* affirmed the Patent Office’s rejection of an application on laches grounds. 303 F.3d 1362, 1363 (Fed. Cir. 2002). Google argues that this Court “focused on unwarranted *delay*” of any sort “[w]ithout mentioning term postponement or extension.” RB49. But Google admits that this Court quoted the Patent Office’s determination that the applicant “deliberately postponed the free public enjoyment” of the claimed invention. RB49 (quoting 303 F.3d at 1365). And Google offers no reason to believe that this Court silently substituted some other rationale for the result.

Nor does Google deny that all the other prosecution-laches cases Sonos cited affirmatively emphasize patentees’ bad-faith efforts to obtain time-wise extensions of their monopolies. OB28-29 (discussing *Personalized Media Commc’ns, LLC v. Apple Inc.*, 57 F.4th 1346 (Fed. Cir. 2023) (*PMC*), and *Hyatt v. Hirshfeld*, 998 F.3d 1347 (Fed. Cir. 2021)). This Court should reaffirm that prosecution laches can apply

only where a patentee's unreasonable delay extends their patent terms, which is now rare under today's 20-years-from-filing term regime.

AIPLA Br. 3-8; USIJ Br. 5-8.

**B. Sonos did not unreasonably delay prosecution.**

Even if there might be some delay so egregious that it could trigger prosecution laches without a term extension, this is not it.

Google does not dispute that prosecution laches must apply "sparingly."

*Symbol Techs., Inc. v. Lemelson Med., Educ. & Rsch. Found.*, 422 F.3d 1378, 1385 (Fed. Cir. 2005). Yet, Google seeks to apply the doctrine in a way that endangers tens of thousands of patent families. GW Br. 7-9.

1. This last sentence is no exaggeration given the breadth of Google's theory. Google fixates on the 13 years that elapsed from Sonos's priority application to the time it filed narrowed claims and makes a startling assertion: "[T]he magnitude of [that] delay" alone "suffices to trigger prosecution laches" without any "[a]dditional factors." RB54. Google then suggests that even an "8-year delay" would suffice. *Id.*

That would mean about 100,000 patents are vulnerable without any further showing of misconduct. GW Br. 7-9. That cannot be the

law; the very case Google cites in support of the proposition emphasizes that delay must be “unreasonable,” and reasonableness depends on “the specific circumstances” of the prosecution history. *Hyatt*, 998 F.3d at 1366.

The “specific circumstances” here include two facts to which Google offers no response: (1) more than half the delay here (seven years) was attributable to the Patent Office, OB36; and (2) the court found that Sonos “diligently prosecuted patent applications” in the zone-scene family. Appx81. Moreover, Sonos already had “broader” claims that covered *all* zone scenes (overlapping or not) well before Google launched its products. RB60. Since Sonos’s invention was covered by those broader claims, Sonos had good reasons not to immediately pursue the narrowed overlapping zone-scene claims, but instead to wait until its own commercial embodiment was ready. OB31 (citing Appx20287).

Google does not dispute that it is both common and reasonable for inventors to conserve resources by waiting to pursue claims until they are prepared to practice the invention. OB37; GW Br. 3-20, 37; USIJ Br. 11-16. Google begrudgingly acknowledges that “the cost of patent

prosecution can justify a delay.” RB56. Yet, it asserts that Sonos loses that latitude because it is sufficiently “well-heeled” that it could have afforded to pay for one additional set of claims earlier. RB56.

Hypothesizing that a different prosecution path would not have bankrupted Sonos does not make the chosen path unreasonable. A behemoth like Google, which is currently more than a thousand times Sonos’s size, might not have to worry about resource allocation, but Sonos, like most companies, does. *See* Appx11513.

2. Google also points to several “factors” that it claims “exacerbated the delay.” RB54. These factors do little to temper the breadth of Google’s approach, especially because Google proposes deferring to laches findings based on almost any combination of factors that might be spun into a narrative of unfairness. *E.g.*, RB57-59. In any event, none of Google’s arguments is persuasive.

To start, Google argues that the delay was more “unreasonable” because “Sonos knew by 2014” that Google and other competitors were “preparing to enter the field.” RB54. That cannot matter, because Sonos (and Google) also knew at the time that Sonos had claims that covered Google’s and others’ products. Besides, multiple cases confirm

that patentees may draft claims to cover a competitor's newly released products, without regard to whether the patentee had advance knowledge of product plans. OB32.

Next, Google contends that when Sonos "claimed overlapping zone scenes in 2019, it rushed to get those claims issued by [requesting] prioritized examination" and overwhelmed the Patent Office "with 70,000 pages of documents for the examiner to dig through." RB55. Google offers no evidence disputing that Sonos submitted those materials to comply with Rule 56's duty of candor. OB40. And there is zero evidence that the materials Sonos submitted were unusual for a patent family of this size or caused any trouble for processing Sonos's applications. So this says nothing about the reasonableness of Sonos's conduct.

Google responds that "[w]hether the PTO struggled to process Sonos's applications is immaterial" because "[t]here was no struggle in *Bogese*." RB58. Google is wrong; the Patent Office denied Bogese's patents when he "did not substantively advance prosecution of his application when required," instead refiling the same claims over and over. *Bogese*, 303 F.3d at 1369. Google also misses the point: Since

Google is faulting Sonos's voluminous submissions, Google has to show that they adversely affected prosecution. *Id.* at 1368.

That leaves only Google's assertion that Sonos engaged in "machinations in omitting a description of Party Mode as a type of zone scene from its initial patent filing," in order "to avoid the risk that [Sonos's] own prior-art system would be invalidating." RB57. That is doubly wrong. First, Google does not dispute that the court's finding that the prior art disclosed zone scenes contradicted the jury's implied fact-finding that the prior art, including Sonos's own prior-art system, *did not* disclose zone scenes. OB32; RB57. All Google says by way of defense is that the district court was permitted to reach a conflicting conclusion because "laches is an *equitable* issue for the *court*." RB57. But a district court violates the Seventh Amendment when its equitable conclusions displace "any factual determinations implicit in the jury's verdict." *Teutscher v. Woodson*, 835 F.3d 936, 944 (9th Cir. 2016). Second, the court's conclusions on both the prior art and a "deceptive addition of new matter," RB59, had no basis in fact, *infra* §§ II.A-B.

**C. Google suffered no prejudice.**

Google cannot dispute that its claim of prejudice depends on proving “that Sonos’s invention remained out of public view while Google invested in its infringing products during the purported delay.” OB41. Google has not come close.

By Google’s own account, its investment began in 2015. Appx11053. Google does not contest that, in 2014, Sonos had secured broad claims covering *all* zone scenes (with or without overlap), in the ’228 patent. OB42; RB60. Nor does Google dispute that, in 2013 and 2014, Sonos “gave Google ample notice to investigate Sonos’s [zone-scene] patents.” OB44. Nor that Sonos warned Google that it infringed Sonos’s zone-scene family, including the ’228 patent, in 2016. *See* Appx7601-7602; Appx15147-15244. Those facts alone demolish any claim of prejudice from the delay in narrowing claims to overlapping zone scenes: Google knew Sonos’s patents covered Google’s planned products and plowed ahead anyway.

In response, Google offers two non sequiturs. First, it argues that the 2007 specification underlying the ’228 patent “nowhere disclosed *overlapping* zone scenes.” RB61 (emphasis added). But for prejudice

purposes, the point is that Google knew the patent *claimed* zone scenes and Google's products used zone scenes. Google did not have "to foresee undisclosed embodiments that Sonos might someday claim," RB61, to know that its products were covered by claims already issued.

Moreover, Sonos *did* disclose overlapping zone scenes at least by the time of its 2007 non-provisional application, which became public in 2013. *Infra* § II.A.

Second, Google protests that "Sonos cannot win this appeal by accusing Google of infringing a patent that Sonos" is "not ... asserting." RB60. Why not? Google's claim of prejudice boils down to complaining that it unwittingly stumbled into infringing because of Sonos's "machinations" in "hiding its technologies, quietly monitoring infringement, and rolling out patents over time." RB57-58 (quoting *PMC*, 57 F.4th at 1352). It is fair game to rebut that argument with undisputed evidence that Google knew, but did not care, that its products were covered by a parent patent that Sonos explicitly emphasized to Google. Any "prejudice" Google suffered here is thus self-inflicted and cannot support prosecution laches.



Finally, Google is wrong to suggest that “prejudice was presumed” simply because of a “thirteen-year delay.” RB59. Google cites only *Hyatt*, which does not support this argument. *Hyatt* reaffirmed that the party invoking laches “must generally prove intervening rights to establish prejudice.” 998 F.3d at 1370. It was only in the “context of a § 145 action” that *Hyatt* indulged a presumption of prejudice. *Id.* That was because the Patent Office is tasked with efficiently administering the patent-issuance system and is not a market participant itself, so “direct proof” of intervening rights can be “difficult” to adduce. *Id.* at 1369-71. An accused infringer faces no such difficulty, which is why they must come forward with direct proof of intervening rights. *See Cancer Rsch. Tech. Ltd. v. Barr Lab’ys, Inc.*, 625 F.3d 724, 729 (Fed. Cir. 2010).

\*\*\*

In sum, the record does not show either unreasonable delay or prejudice—and certainly not by clear-and-convincing evidence, which, contrary to Google’s assertion, RB52-53, is the correct burden of proof for reasons already explained, *see* OB33; AIPLA Br. 19-21. This Court should reverse the laches ruling.

## **II. The District Court Erred In Granting JMOL On The Zone-Scene Patents' Priority Date.**

Google fails to justify the priority-date JMOL. It cannot explain away the many disclosures that independently, and together, teach overlapping zone scenes. § II.A. Its convoluted narrative that written description turns on subtle contextual changes to the specification from 2006 to 2019 is entirely unsupported. § II.B. Separately, Google fails to justify the procedural irregularities or overcome its own forfeitures. § II.C. Each flaw warrants outright reversal, but at a minimum Sonos is entitled to a new trial to resolve factual questions.

### **A. Sonos disclosed overlapping zone scenes no later than the 2007 non-provisional.**

Google concedes, as it must, that it bore the burden of proving that the zone-scene patents were anticipated and thus invalid. RB28. But it never grapples with just how heavy that burden is here, especially considering its concession that Sonos conceived of overlapping zone scenes and “described” the invention in “internal ... documents” before filing the 2006 provisional and 2007 non-provisional applications. RB28. Sonos identified multiple disclosures, each supporting possession of overlapping zone scenes: the statement of the

problem; Figures 3, 6, and 7, and their accompanying descriptions; and the optional all-zones scene. OB49-57. To sustain the district court's JMOL ruling, Google must disprove each one by clear-and-convincing evidence, and also demonstrate that there was not a single disputed fact as to any of them. And Google ignores that it is not enough to address each disclosure in isolation; rather, Google must show that no reasonable jury could find the combination of disclosures sufficient to establish written description. *See Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1365 (Fed. Cir. 2003) (assessing the “entirety of the specification”).

***Statement of the problem.*** The 2006 and 2007 applications explain that zone scenes would help users listen to audio “on different combinations of players at different points in the day,” even when those groups shared overlapping members. OB51; *see* Appx8332-8333. Google's only response is that this description also “appeared in a 2004 [Sonos] application.” RB30. So what? Sonos pioneered wireless multiroom home audio; it is thus unsurprising that the background sections of several Sonos applications describe the same overarching

problem, where each invention solves a different aspect of that problem. *See* Appx20253-20260.

**Figure 3.** Everyone agrees that Figure 3A illustrates a Morning scene, Figure 3B illustrates an Evening scene, and both contain the Bedroom, Den, and Dining Room. Appx8345-8346; *see* RB30-32. Google concedes that these figures would “disclose overlapping zone scenes” if they “depict two zone scenes in the same system”—i.e., the same household. RB30. It nonetheless argues that “[n]o reasonable factfinder could conclude” that a skilled artisan would read the figures that way. RB32. But Sonos’s expert, Dr. Almeroth, understood them to “clearly convey” exactly that. *See* Appx5210-5211 (addressing the same figures in the ’885 and ’966 patents’ specification).

Google cannot dismiss that opinion as “conclusory,” RB32, because Dr. Almeroth fully explained it. He testified that all the zones in Figure 3A (Morning) also appear in Figure 3B (Evening), indicating that they reflect the same household. Appx5210-5211; *see* Appx8345-8346; Appx8359-8360. If the inventors intended to describe zone scenes in two different households, they would not have chosen to replicate all the zones (including the unusual Foyer speaker), with the same icons for

each, from the first scene to the second. Nor would they have named the scenes for different times of day. This nomenclature achieves exactly what the statement of the problem describes as the purpose of zone scenes in a single household: allowing different combinations of sometimes overlapping players in the morning versus the evening.

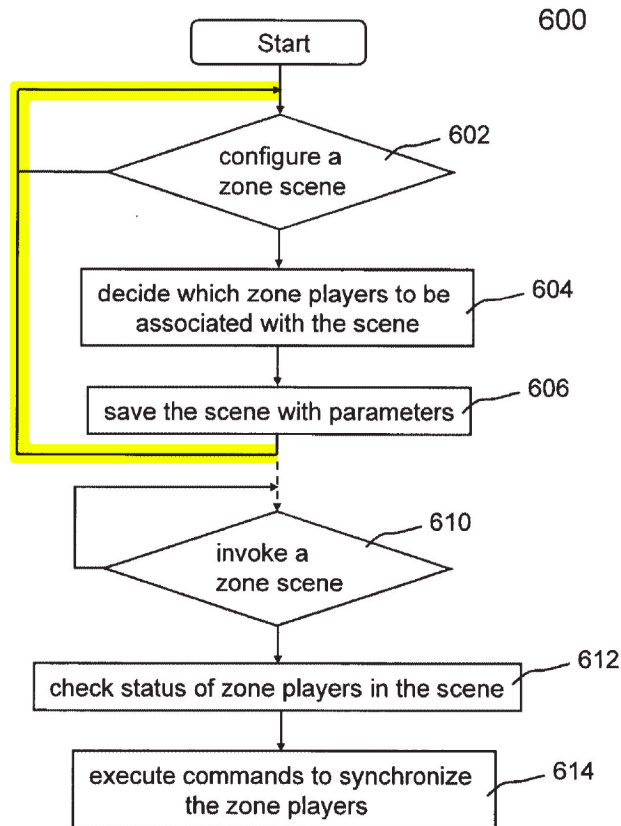
Appx8332-8333.

Google fails to overcome these clear indications and expert testimony (certainly not as a matter of law). It argues that the Morning and Evening scenes must depict different households because Figure 3B includes two additional zones (Garage and Garden). RB32. But Figure 3B simply depicts a user's decision to combine the zones in the Morning scene with two more zones in the user's household where the user wants music in the Evening: the Garden and Garage. Appx8345-8346.

Even further afield is Google's focus on a sentence in the specification noting that Bathroom, Family Room and Foyer "should be separated from any group if they were part of a group before the [Evening] Zone Scene was invoked." RB32 (quoting Appx8346). None of those zones is even in the Morning or Evening scenes of Figure 3. Appx8345-8346. This statement thus has no bearing on whether those

scenes overlap. And Google ignores the next sentence, which explains that “zones do not need to be separated before a zone scene is invoked,” such that the overlapping members—Bedroom, Den, and Dining Room—can be in both the Morning and Evening scenes without “need[ing] to be separated.” Appx8346; Appx8261 (2006 provisional).

**Figure 6.** Google is wrong to insist that Figure 6 “adresse[s] creation and invocation of *one* zone scene—not multiple zone scenes.” RB33. Figure 6 teaches that after a user creates and saves a scene, she may go back to create and save another scene before invoking any particular one. *See* Appx8349. As the highlighted arrow shows, the flow chart is iterative:

**FIG. 6**

Appx8365 (highlighting added). Each zone scene is saved before the next one is created. *See* Appx8349. Moreover, for each scene so created, the user can “activate the scene *at any time.*” Appx8349 (emphasis added). That means multiple scenes must be able to coexist, as Sonos’s expert testified. Appx5209.

Also relevant here is the “Summary of the Invention,” which explains that when users create a zone scene using a controller, they can “select any of the players in the system”—not only those players that have not been assigned to another scene. Appx8334. This

discloses the same functionality as the “ALL the zones” sentence that Google falsely characterizes as “new matter” added to the specification in 2019. *Infra* § II.B. Google argues that this summary says “nothing about overlapping zone scenes” because it is “untethered to Figure 6.” RB33. But the specification must be read in its “entirety,” *Cordis*, 339 F.3d at 1365, including by understanding exemplary embodiments in light of the summary.

The very next sentence of the summary teaches that when users reach the step of saving a set of players as a scene, they can save “*various scenes ... in any of the members.*” Appx8334 (emphasis added). Google brushes aside this disclosure as relating to “where zone scenes could be *saved*, not how they were *composed.*” RB33. That misses the point: If a speaker that is in one zone scene can save its various other scenes, then it must be capable of saving—and thus belonging to—multiple scenes at a time. OB54-55; *see* Appx5210-5211 (Sonos’s expert). Especially when read with the preceding sentence, these complementary disclosures teach that zone scenes can overlap.

Google twists the meaning of the “various scenes” statement, claiming it teaches that *any* zone player can save *any* scene, because all



“the players were networked” and could “communicat[e].” RB34. But the specification does not say that zone scenes may be saved in any *player* in the *system*. It says, rather, that “various scenes may be saved in any of the *members* in a *group*.” Appx8334 (emphasis added); *see also* Appx8349 (step 606: “The scene may be saved in any one of the members in the scene”). Because “members” are “in the scene,” Appx8349, this statement does not disclose that players can save “various scenes” without being in them, Appx8334; *see* Appx5417.

**Figure 7.** Everyone agrees that Figure 7 discloses two *coexisting* zone scenes: “Party Mode” and “Morning Wakeup.” *See* OB55-56; RB35. Google concedes that *if* a skilled artisan could understand “Party Mode” as “including all zone players,” then this image would disclose overlapping zone scenes. RB35; *see* RB28 (conceding that UI documents “disclosed overlapping zone scenes” for that reason). Google also concedes that the inventor clearly understood “Party Mode” to include “all zone players.” RB6. Google’s only argument is that skilled artisans would not have appreciated that background, because the 2006 and 2007 applications did not spell it out verbatim. RB35. But as Google concedes, “Party Mode” was a known feature of Sonos’s 2005 system

that grouped together “all zone players” in the system, RB6, which is how Google’s own expert described Figure 7, Appx21338 (“Party Mode, which is all of the zones in the house”).

In any event, again, what a skilled artisan would have understood about Figure 7 was at least a disputed factual question, as was the credibility determination underlying it, OB56-57, which Google does not even address.

***Optional all-zones scene.*** Whatever ambiguity Google finds in “Party Mode” cannot negate other passages that unambiguously disclose the same thing: a scene comprising “all zones.” OB55. Google does not dispute that these passages explicitly disclose an “[o]ptional[] ... command that links *all zones* in one step.” Appx8252 (emphasis added); see Appx8252 (2006 provisional: “This may be a simple form of a zone scene”); Appx8346 (similar in 2007 application). Google tacitly concedes that these commands would teach overlapping scenes *if* they “coexist[] with a scene of less than all zones.” RB35. Google just insists that the specification does not say they “coexist[]” in the same household. RB35. Of course they do. The applications describe the “all zones” scene immediately after describing scenes containing fewer than

all zones, without any suggestion that they are in different households. Appx8251-8252; Appx8346. Moreover, it would make no sense to describe this “all zones” scene as “[o]ptional[]” if it was the only scene that could exist in this embodiment. Appx8252. Nowhere does the specification limit the “all zones” scene to a household with no other scenes. Just the opposite: The specification says that “separate or alternative embodiments” are not “mutually exclusive.” Appx8337 (2007 application); Appx8242 (2006 provisional).

**B. Google did not prove that Sonos added new matter to the specification in 2019.**

Central to the district court’s laches and invalidity rulings is the finding that Sonos added new matter in 2019 by transporting a single sentence—the “ALL the zones” sentence—from the provisional’s appendix to the specification. Neither ruling can stand if any one (or combinations) of the disclosures discussed above described overlapping zone scenes, or if the question of the disclosures’ meaning was for the jury to decide. But the argument also fails on its own terms.

1. For starters, Google falsely insinuates that in August 2019, Sonos *simultaneously* amended its zone-scene claims and specification to cover and support overlapping zone scenes. RB12, 36-37. But Google

does not dispute that the claims already covered overlapping zone scenes before August 2019, and the examiner had already blessed written-description support for overlap. OB66-67; Appx74.

Google also wrongly suggests that Sonos made that amendment to the specification in response to the Yamaha DME prior art. RB12, 36-37. Yamaha DME does not teach zone scenes, which is why Google's expert did not rely on that reference in his invalidity analysis at trial. Appx21490; Appx21985-21989.

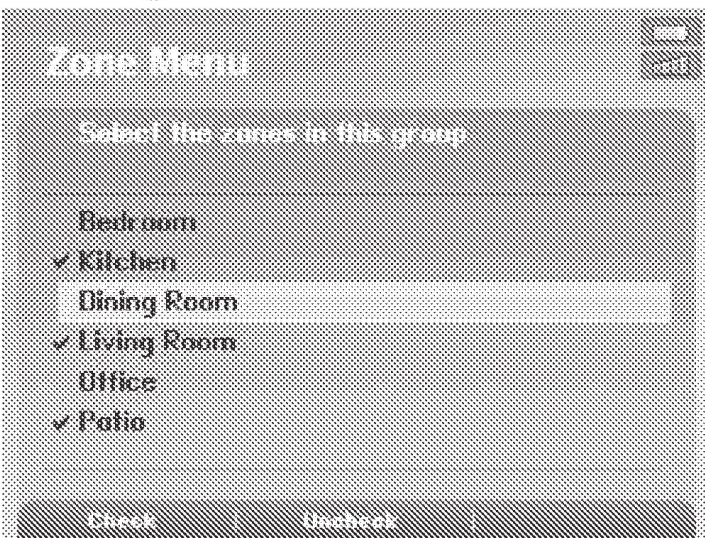
Google does not dispute that the "ALL the zones" sentence conformed the specification with a parallel pending application in the same family, nor that this explanation fits the facts better than its narrative. RB43; OB67-68; Appx8206. Instead, Google dodges the point in two ways. First, Google asserts that "whether Sonos added new matter in 2019 does not turn on whether Sonos acted in bad faith." RB43. That is true in theory. But here, both Google and the district court center the new-matter analysis around Sonos's motivation. *See* RB15, 42, 55; Appx96-98. And this same narrative about Sonos's motivation also underlies the court's laches analysis. Appx83.

Google's second dodge is that Sonos "presented no testimony from prosecution or in-house counsel making this excuse." RB43. That is misleading. During trial, Sonos implored the district court to let it develop expert evidence about the prosecution history and priority date, but the court refused. *See, e.g.*, Appx8227; Appx10518-10519; OB69. Google also falsely says that Sonos "could have offered such evidence with its post-trial briefing" on prosecution laches. RB46. The court ordered the parties not to cite anything in those briefs that was "not in evidence before the jury." Appx11498-11499. As discussed at 32-34, the absence of evidence about Sonos's prosecution strategy reflects the procedural infirmities below, not an evidentiary failure by Sonos.

2. Google also misreads the appendix and specification in asserting that the meaning of the "ALL the zones" sentence changed from 2006 to 2019. RB13-15, 36-40. Google concedes that Sonos's original conception documents showed overlapping zone scenes. RB28. But Google contends that (a) the "ALL the zones" sentence and corresponding figure in the 2006 provisional addressed only dynamic groups, and (b) Sonos then converted that figure into one about zone scenes in the 2007 non-provisional before (c) improperly merging the

figure with the sentence about dynamic groups in 2019, thereby disclosing overlapping zone scenes for the first time. Each step distorts the disclosures to yield a far-fetched narrative.

As to proposition (a), Google is wrong that the critical sentence and figure in the 2006 provisional had nothing to do with zone scenes. In support of that assertion, Google mischaracterizes Section 4 of Appendix A to the 2006 provisional, where the “ALL the zones” sentence originated. Google says that “Section 4 did not address zone scenes at all.” RB37. Of course it did. The entire UI document in Appendix A is titled “Sonos UI Specification: Zone Scenes.” Appx8275. To state the obvious—and as Google at one point acknowledges—that document addresses “zone scenes,” not dynamic groups. RB8. Google also ignores the sequence. RB37-39. Section 3 explains how to “set up” zone scenes the “expected” way—using a desktop controller. Appx8267. Then Section 4, titled “*Alternative* Linking Methods,” shows an *alternative* way to create zone scenes—using a handheld controller. Appx8275 (emphasis added); Appx8267. It depicts two “Zone Menu” interfaces:



- The list of zones in the screen above includes ALL the zones in the system, including the Zones that are already grouped.

Appx8275. As Google notes, the arrow between the two images indicates that a user navigates to the bottom screen by clicking the “Zone Linking” button on the top screen. RB39. Google’s entire theory turns on its assumption that this “Zone Linking” button is the portal to

creating *dynamic groups* only, while the “Scenes” button (immediately to its right) is the gateway to creating *zone scenes*. RB39-41.

That, too, is wrong. “Scenes” is not a button to *create* zone scenes but rather to *invoke* scenes already created. That is evident from Section 2, entitled “*Invoking a Scene*,” which explains that “[p]ressing the scene softkey will show ... all the available scenes”—i.e., all zone scenes already created. Appx8263-8264 (emphasis added). Thus, Section 4—which comes directly after Section 3 on desktop-based creation of zone scenes—is better read to mean that “Zone Linking” leads to a screen for creating zone scenes and “Scenes” leads to a screen for invoking them. This further confirms that the bottom screen in Section 4 (which became Figure 5B) simply illustrates an “alternative” way to create zone scenes.

Even if proposition (a) were true, it does not help Google one bit, because of what it concedes in proposition (b): that Sonos expressly described Figure 5B in the 2007 application as an interface for *creating zone scenes*. RB41; Appx8363; Appx8336; Appx8348. Thus, whatever ambiguity might be found in the 2006 provisional, the meaning was clear by 2007: Figure 5B taught setting up zone scenes.



Google calls Figure 5B “a red herring” because of proposition (c): In Google’s view, Sonos “*again* changed the meaning of Figure 5B in 2019 by adding the all-zones sentence.” RB41. That is wrong. As everyone agrees, both before and after the 2019 amendment, Figure 5B described zone scenes. All Sonos did was move a description of that image from the 2006 provisional into the specification—without any context change. The bottom line is that the latest priority date is 2007, long before Google released its infringing products. OB65-66.

Apart from the flaws in each step above, Google’s overall narrative is too far-fetched to be taken seriously. Google suggests that, even though the examiner had already found adequate written-description support in the 2019 specification when he accepted Sonos’s claims explicitly requiring overlap, Sonos knew the examiner’s review was flawed and wanted to shore up written description. Fortunately, Sonos had laid the groundwork in 2007, when it changed the meaning of an image from the provisional’s appendix. Now, 12 years later, Sonos could pull into the specification a sentence that happened to correspond to the image Sonos had altered. Whether by luck or foresight, Sonos

finally disclosed overlapping zone scenes. And because its changes were incremental, Sonos’s final “sleight of hand was not obvious.” RB42.

Even if Google’s narrative about the prosecution history or its interpretation of the “ALL the zones” sentence were plausible, any debate about why Sonos amended the specification or how “context” affected the meaning of the same sentence in different applications would, at best, present disputes of fact that preclude JMOL.

**C. The procedural irregularities and Google’s forfeitures justify reversal.**

Google scarcely tries to defend the district court’s highly irregular procedure. Google does not dispute that Sonos proceeded to trial without any notice that the trial would end up being about written description, new matter, and priority date. By the time the court devised its narrative of Sonos’s purported subterfuge, it was too late for Sonos to present witnesses or evidence specific to those factual questions. Yet the court resolved them on a trial record developed to address unrelated issues. And despite all that, Google now faults Sonos for evidentiary gaps. This was no way to try a case. The procedural irregularities are reason alone to reverse the district court’s rulings on

all those topics, without giving Google a chance to try the challenges it forfeited. OB46-48, 69-71.

1. To fight forfeiture, Google first claims that it “expressly” raised a new-matter challenge during the showdown. RB44 (citing Appx4913-4917). But there, Google said nothing about the amendments to the specification it now harps on; it argued only that the current zone-scene specification (post-2019 amendment) did not provide written description for overlapping zone scenes. Appx4913-4917.

Worse, Google’s expert later discussed in a report how Sonos had amended the zone-scene specification in 2019, including by adding the “ALL the zones” sentence. Appx10985-10990; Appx10994. After that, Google moved for summary judgment again before trial on multiple grounds, but still failed to make any new-matter argument about the specification. Appx6317-6350. Google does not even try to excuse that omission. And of course, Google did not proceed to trial on the new-matter and related issues it is now pressing.

2. Google protests that it could not have sought a trial on those subjects because the district court “granted summary judgment to Sonos” on written description. RB44-45 (citing Appx5416-5417). Not

so: The court granted Sonos’s motion that Google infringed, and denied Google’s on written description. Appx5403-5419; *see* Appx6615-6616.

An order denying summary judgment “does not foreclose trial on th[ose] issues.” *EcoFactor, Inc. v. Google LLC*, 104 F.4th 243, 249 (Fed. Cir. 2024) (internal citation omitted). It “decides only one thing—that the case should go to trial.” *Id.* Nothing stopped Google from seeking a trial on written description or new matter.

Google notes that courts may “reconsider interlocutory rulings before final judgment.” RB45. There was nothing to “reconsider” about new matter or priority date because Google never raised those issues until the court concocted its narrative during trial. Regardless, once the court mentioned its concerns—on the third day of trial, well before Google’s invalidity case—Google *still* did not ask to try any of them. Google had plenty of opportunity to do so before the court said that those issues were “not [going] to the jury.” *Contra* RB45 (partially quoting Appx21412); *see* OB47, 70-71. Google omits why the court said that: because the “case ha[d] not been tried that way.” Appx21412.

**3.** Even if the court had the authority to raise these issues mid-trial, it did not have the authority either to decide disputed issues

without giving the parties the opportunity to present relevant evidence or to resolve disputed facts reserved for the jury. So Google is doubly wrong in insisting that the court had unfettered discretion to find facts because it “s[at] in equity” to resolve laches. RB46.

For one thing, even a court sitting in equity still must allow the parties the opportunity to present evidence on disputed issues. To take the starkest example, it was impermissible to make any determination on Sonos’s motivation without allowing Sonos to introduce evidence on the subject. *See supra* 25. So, too, for all the disputed issues of how a skilled artisan would understand the disclosures.

Google maintains that Sonos had a “fair opportunity to be heard” about new matter because Sonos submitted numerous briefs. RB46. But legal arguments are no substitute for witnesses and evidentiary submissions, and the district court repeatedly refused to let Sonos develop crucial expert evidence on those issues. *See supra* 25.

As important, the court resolved disputed facts about defenses—anticipation, written description, and new matter—all reserved for the jury. OB48. Equity does not allow a judge to resolve those defenses.

4. Google forfeited the new-matter issues yet again by failing to seek JMOL under Rule 50. Google protests that Rule 50 “is a red herring here because the parties were ordered *not* to present [the new-matter] issues to the jury.” RB45-46. But again, no one ordered Google not to try the defenses. The court said it was not instructing the jury on them because Google had not tried the case that way. Appx21412.

Even if Google’s characterization were correct, that just compounds the procedural unfairness. The court made clear that its rulings on new matter (and the tagalong issues of priority date and anticipation) depended on the trial evidence, and Google admits that trial evidence changed the court’s mind about the prior written-description order. RB45. Post-verdict, JMOL was the only conceivable procedural mechanism by which the court could have resolved those issues. But Sonos was not “fully heard ... during a jury trial” on the issues, Fed. R. Civ. P. 50, and Google never raised them in Rule 50 motions, so the court had no authority to enter JMOL for Google. OB69-70.

In sum, Google had every opportunity to raise the issues in an orderly way, but it forfeited them multiple times over. That is reason

enough to reverse outright without giving Google another opportunity to try these issues.

### **III. The District Court Wrongly Invalidated The Direct-Control Patents.**

#### **A. Sonos raised a material factual dispute over the device-picker.**

The district court improperly resolved a factual dispute over whether Google’s ’998 patent discloses the device-picker claimed in the ’615 and ’033 patents. OB72-76.

Google’s response begins with meritless arguments about mootness and forfeiture. Google says “[t]he ’615 patent is” or “will be moot” because Sonos did not appeal the judgment of noninfringement for claim 13, and that claim (and others) might “be canceled ... in No. 2023-2040.” RB62. The judgment of noninfringement is irrelevant because Google asserted invalidity as a counterclaim for this patent. Appx563; *see* Appx108. Thus, “validity does not become moot [with] a determination of non-infringement.” *Solomon Techs. v. ITC*, 524 F.3d 1310, 1319 (Fed. Cir. 2008). And the pending IPR appeal does not moot claim 13’s validity now.

For the '033 patent, Google contends that Sonos forfeited the device-picker argument below. RB62. By the time the parties briefed the '033 patent, the district court had already held, for the '615 patent, that the '998 patent discloses the device-picker. Appx14-17; Appx35-37. As Google told the court, the device-picker question for the '033 patent was “exactly the same issue that you decided before” for the '615 patent. Appx6702-6703; *see* Appx6337-6338. Thus, repeating the argument for the '033 patent would have been “futile” and was unnecessary to preserve the issue for appellate review. *See United States v. Hernandez-Estrada*, 749 F.3d 1154, 1160 (9th Cir. 2014) (en banc).

On the substance, Google does not dispute that validity turns on whether the '998 patent teaches “the ability to control all ‘controlled devices’ collectively” (which would not meet the claim limitations), or the ability “to select a particular ‘controlled device’ for playback” (which would). Appx5150. Google contends that “no genuine ambiguity” exists on that question and “the court arrived at the *only* reasonable reading.” RB63-65. But that contradicts Sonos’s expert testimony, from Dr. Schmidt, that the '998 patent “is ambiguous” on that very point. Appx5150.



Google dismisses this opinion as “speculation” and “conclusory,” RB64, without explaining why. But Dr. Schmidt explained his conclusion. He pointed to the ’998 patent’s text, the deposition of one of its named inventors, and his understanding of how the related YouTube Remote system “actually operated.” Appx5150 (citing Appx5133; Appx5190). Moreover, there is nothing wrong with a skilled artisan like Dr. Schmidt saying the “disclosure was ‘not clear to [him].’” RB64 (quoting Appx5150). It is not speculative to describe why a skilled artisan could read the ’998 patent differently from Google—i.e., that the patent “may be referring” only to selecting “all ‘controlled devices’ collectively.” Appx5150. That is the essence of ambiguity. Because the ’998 patent is “ambiguous,” “exactly what [it] teaches ... should have been resolved by the jury.” *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1221 (Fed. Cir. 2003).

Google also suggests that summary judgment was proper because the direct-control patents claim the device-picker in different ways. RB63 n.2. Again, Google told the district court that the device-picker question was “exactly the same” for both patents. *Supra* 36. Google cannot avoid that inconvenient position by raising a new argument

about the claim language, much less in a footnote. *Hylete LLC v. Hybrid Athletics, LLC*, 931 F.3d 1170, 1174-75 (Fed. Cir. 2019).

**B. Sonos raised a material factual dispute over the remote-playback-queue limitations.**

Claim 1 requires “playback of a remote playback queue.” In particular, the playback device must assume “playback responsibility for the remote playback queue” from the computing device. Appx322 17:39-42, 17:66-18:10. The parties dispute whether YouTube Remote’s party mode taught “playback of the remote playback queue.” Appx322 18:3-10. Sonos’s position is that it did not because screens in party mode played back from their own local playback queues and not from a remote playback queue. Appx6461-6466.

Google studiously avoids addressing the relevant claim limitation. It does not dispute that Dr. Schmidt opined that each screen in party mode “use[d] its own local playback queue ... to playback the media items sent from” users’ phones. Appx6465; *see* OB77-79. Google also ignores that its own expert described a system that operates in the same manner as party mode as playing from a local playback queue. *See* OB78-79 (citing Appx4717-4718).

Instead, Google fixates on a different part of the claims, requiring “a remote playback queue provided by a cloud-based computing system.” RB66-67 (quoting Appx322 17:40-42). Google argues that this language allows for “downloading information” from a remote queue to a local queue. RB66-67. This is unavailing because the prior art does not invalidate unless it teaches every limitation.

Because Google focuses on the wrong limitation, it achieves nothing by citing Dr. Schmidt’s opinion on a proposed noninfringing alternative. RB66-67. Dr. Schmidt merely acknowledged that local and remote playback queues might sometimes coexist. Appx6281. That does not mean that screens in party mode played back from a remote playback queue.

Because there was ample evidence, from both sides’ experts, that party mode did not teach playback from a remote playback queue, summary judgment was improper. *TriMed, Inc. v. Stryker Corp.*, 608 F.3d 1333, 1340-41 (Fed. Cir. 2010).

## CONCLUSION

This Court should reverse or vacate the judgment below and remand for further proceedings.

July 22, 2024

George I. Lee  
Sean M. Sullivan  
Rory P. Shea  
J. Dan Smith  
Cole B. Richter  
LEE SULLIVAN SHEA & SMITH LLP  
656 W. Randolph St., Floor 5W  
Chicago, IL 60661

Clement S. Roberts  
Elizabeth R. Moulton  
Sachi Schuricht  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
405 Howard Street  
San Francisco, CA 94105

Respectfully submitted,

/s/ E. Joshua Rosenkranz

E. Joshua Rosenkranz  
Joseph R. Kolker  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
51 West 52nd Street  
New York, NY 10019  
(212) 506-5000

Alyssa Caridis  
Nicholas González  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
355 S. Grand Avenue, Suite 2700  
Los Angeles, CA 90071

Lauren A. Weber  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
401 Union Street, Suite 3300  
Seattle, WA 98101

*Counsel for Appellant*

## CERTIFICATE OF COMPLIANCE

The brief complies with the type-volume limitation of Fed. Cir. R. 28.1(b)(3) because this brief contains 6,991 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f) and Fed. Cir. R. 32(b)(2).

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word for Microsoft 365 in Century Schoolbook 14-point font.

ORRICK, HERRINGTON & SUTCLIFFE LLP

*/s/ E. Joshua Rosenkranz*

---

E. Joshua Rosenkranz

*Counsel for Appellant*