

NOTE: This disposition is nonprecedential.

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

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**TVNGO LTD. (BVI),**  
*Plaintiff-Appellant*

v.

**LG ELECTRONICS INC., LG ELECTRONICS USA,  
INC.,**  
*Defendants-Appellees*

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2020-1837

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Appeal from the United States District Court for the  
District of New Jersey in No. 1:18-cv-10238-RMB-KMW,  
Judge Renee Marie Bumb.

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Decided: June 28, 2021

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CHARLES CANTINE, Dunlap Bennett & Ludwig PLLC,  
New York, NY, argued for plaintiff-appellant.

WILLIAM R. PETERSON, Morgan, Lewis & Bockius LLP,  
Houston, TX, argued for defendants-appellees. Also repre-  
sented by NATALIE A. BENNETT, Washington, DC; ERIC  
KRAEUTLER, Philadelphia, PA; JEREMY DEANE PETERSON,  
PV Law LLP, Washington, DC.

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Before PROST\*, SCHALL, and REYNA, *Circuit Judges*.

PROST, *Circuit Judge*.

TVnGO Ltd. (BVI) (“TVnGO”) appeals a final patent-invalidity judgment by the U.S. District Court for the District of New Jersey. We agree that the patent claims TVnGO asserts against LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, “LGE”) are indefinite under 35 U.S.C. § 112, paragraph 2.<sup>1</sup> We therefore affirm.

## BACKGROUND

### I

TVnGO owns U.S. Patent Nos. 8,132,220 (“the ’220 patent”), 9,124,945 (“the ’945 patent”), 9,392,339 (“the ’339 patent”), 9,407,969 (“the ’969 patent”), and 9,794,621 (“the ’621 patent”), which share a specification and drawings.<sup>2</sup> The patents relate to providing “a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site.” ’220 patent col. 2 ll. 20–22. Figure 1, for example, depicts a “TV-Internet Integration Box” with inputs from a cable box and the internet, and an output to a television:

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\* Circuit Judge Sharon Prost vacated the position of Chief Judge on May 21, 2021.

<sup>1</sup> The America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284, effective September 16, 2012, designated § 112, paragraph 2 as § 112(b). These patents stem from an application filed in 2005, so we refer to pre-AIA § 112.

<sup>2</sup> For simplicity, all citations to the shared specification are to the ’220 patent.

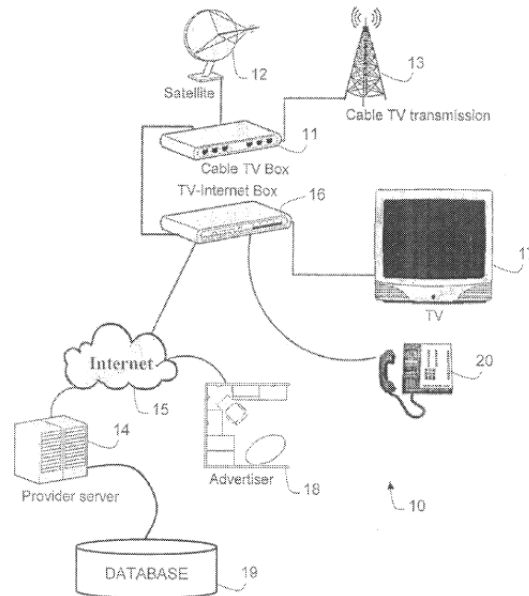
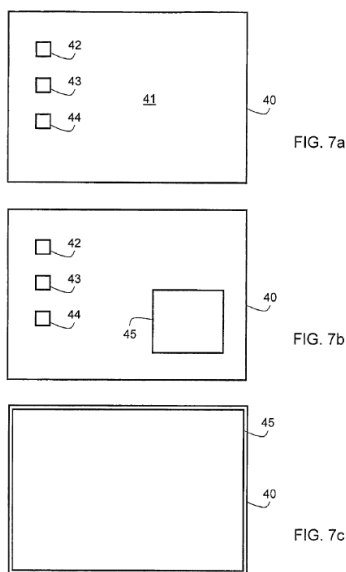


FIG. 1

*Id.* at Fig. 1.

This system can be influenced in various ways. An advertiser may specify conditions for displaying advertisements, *id.* at col. 3 ll. 59–66, an IP-content provider may store “calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises,” *id.* at col. 4 ll. 9–13, and a subscriber may select “what kind of IP content” he or she “wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed,” *id.* at col. 4 ll. 21–24. The specification further describes a remote control, *id.* at col. 7 ll. 7–50, that can be programmed according to the embodiment of Figures 7a–c:



*Id.* at Fig. 7a–c.

Figure 7a “shows the default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40,” as well as “IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site of known address.” *Id.* at col. 7 ll. 29–35. In TVnGO’s view, an icon “could take the form of a commonly recognized logo, such as the Netflix logo.” *TVnGO Ltd. (BVI) v. LG Elecs., Inc.*, 2020 WL 1899781, at \*1 n.3 (D.N.J. Apr. 17, 2020). Figure 7b shows that, upon “pressing the key on the remote control unit 30 that corresponds to the icon 42, the IP content corresponding thereto is displayed within a small window 45.” ’220 patent col. 7 ll. 35–37. At this point, “[t]he icons 42, 43 and 44 remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit 30.” *Id.* at col. 7 ll. 39–42. “On pressing a key a second time in succession, the IP content is re-sized so that its window 45 occupies substantially the whole area of the screen,” as shown in Figure 7c. *Id.* at col. 7 ll. 42–44. “On pressing

the key a third time in succession, the situation reverts to the default.” *Id.* at col. 7 ll. 44–46. “Thus, each key operates as a three-way toggle that switches between three different display modes.” *Id.* at col. 7 ll. 48–50.

## II

TVnGO alleges that LGE’s “Smart TVs” infringe the asserted patents, which it describes as generally directed to “methods and devices that make televisions ‘smart.’” J.A. 103–04 (Complaint). After a *Markman* hearing, pre- and post-hearing briefing, and supplemental briefing, the district court issued a claim-construction opinion concluding that the two claim phrases at issue here render the asserted claims indefinite under § 112, paragraph 2. *TVnGO*, 2020 WL 1899781, at \*7. In the district court’s view, these phrases present “irreconcilable inconsistencies” within and across the asserted patents (“intra-” and “inter-patent” inconsistencies, respectively). *Id.* at \*3. “Try as it might,” the district court could not “construe the claims with any confidence.” *Id.* at \*4. Accordingly, the court held the asserted claims invalid. J.A. 18.<sup>3</sup> TVnGO appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

## DISCUSSION

“[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (2014) (cleaned up). Accordingly, “[t]he Patent Act requires that a patent specification ‘conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant

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<sup>3</sup> The claims are: ’220 patent claims 1, 9–10, 13, 17, and 20; ’945 patent claims 1, 4, 8, 9, 12, 15, 19, and 21; ’696 patent claims 1, 9–10, 13, 17, and 20; ’339 patent claims 1, 4–7, 12–15, and 18; and ’621 patent claims 1, 4, 9, and 11.

regards as [the] invention.” *Id.* at 901 (second alteration in original) (quoting 35 U.S.C. § 112, para. 2). Patent claims are indefinite if they “fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Id.*

“In the face of an allegation of indefiniteness, general principles of claim construction apply.” *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010)). The words of a claim “are generally given their ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). “[C]laims are to be read in light of the patent’s specification and prosecution history.” *Nautilus*, 572 U.S. at 908.

Whether a claim is indefinite under 35 U.S.C. § 112 is ultimately a legal conclusion that we review de novo. *Cox Commc’ns, Inc. v. Sprint Commc’n Co. LP*, 838 F.3d 1224, 1228 (Fed. Cir. 2016). “Any fact critical to a holding on indefiniteness . . . must be proven by the challenger by clear and convincing evidence.” *Id.* (alteration in original) (quoting *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003)). “If indefiniteness can be determined based solely on intrinsic evidence, our review is de novo.” *Id.* Here, the district court relied on “a review of the claim terms, the specifications, and the prosecution histories” and declined to rely on TVnGO’s expert testimony because it had “no support” in the patents. *TVnGO*, 2020 WL 1899781, at \*6–7. Therefore, our review is de novo.

Two phrases are at issue here: “overlay activation criterion” and “overlay activation signal.”<sup>4</sup> In the claims, these phrases relate generally to producing overlays (e.g., in Figures 7a–c above). *TVnGO*, 2020 WL 1899781, at \*1. But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district court. Before addressing those inconsistencies, however, we first highlight the lack of intrinsic evidence in this case as to the meanings of these phrases.

For starters, the parties agree that neither “overlay activation criterion” nor “overlay activation signal” has an ordinary meaning in the art. Appellees’ Br. 15; Reply Br. 13; see *TVnGO*, 2020 WL 1899781, at \*3 & n.8. Instead, TVnGO contends that a skilled artisan would understand the disputed phrases by stitching together their constituent words.<sup>5</sup> Reply Br. 2 (“[T]he terms – “overlay,” “activation,” “criterion,” and “signal” – are each easily understood, plain English words.”); Oral Arg. at 2:24–46 (arguing that “overlay has a meaning, criterion has a meaning, signal has a meaning, activation has a meaning”).<sup>6</sup> Here, we are unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean.

The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification, as

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<sup>4</sup> The district court’s analysis as to “overlay activation signal” applied equally to the phrase “special overlay activation signal” appearing in the ’945 and ’621 patents. *TVnGO*, 2020 WL 1899781, at \*2 n.4.

<sup>5</sup> At the district court, TVnGO contended that no construction was necessary and in the alternative proposed constructions which, LGE notes, expanded in response to the inconsistencies LGE raised. See Appellees’ Br. 23–28.

<sup>6</sup> No. 20-1837, <http://www.cafc.uscourts.gov/oral-argument-recordings>.

both were added to the claims during prosecution. And the “limited information” provided by the prosecution history isn’t enough to provide reasonable certainty here either. *TVnGO*, 2020 WL 1899781, at \*6. Like the district court, we are unconvinced that the disputed phrases “are far from indefinite” merely because they were “added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed.” Appellant’s Br. 10; *see Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1380 (Fed. Cir. 2017). This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below as to the ’339, ’945, and ’621 patents (discussed in Section I), and the ’220 and ’969 patents (discussed in Section II).

## I

We turn now to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the ’339, ’934, and ’621 patents: an inconsistency between the specification and the claims as to the result achieved by an “overlay activation criterion” or “overlay activation signal.” Specifically, beyond its failure to mention the disputed phrases, the specification’s use of the words “activates” and “activating” injects further uncertainty. While the specification uses these words to describe activating an already overlaid icon to display the IP content it represents, the claims appear to use the disputed phrases with respect to displaying an overlay in the first place—creating confusion as to which reading is correct. On the one hand, the specification states that “pressing on a specific key *activates* the displayed icon,” ’220 patent col. 7 ll. 19–22 (emphasis added), and references “the appropriate keys or button for *activating* each icon,” *id.* at col. 7 ll. 24–25 (emphasis added). The claims, however, point in a different direction. With respect to the “criterion” term, ’339 patent claims 1 and 15 recite “respond[ing] to an overlay activation criterion to cause the display screen to display the overlays.” With respect to the “signal” term, ’945 patent claims 1 and



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12 state that the result of processing the “overlay activation signal” is “generating display drive signals causing the TV screen to display the overlays,” and ’621 patent claim 1 recites “generating display drive signals that cause the TV screen to display the one or more overlays.”

TVnGO responds that the disputed terms cover both displaying an initial overlay and displaying IP material. *E.g.*, Reply Br. 26. But we are not persuaded that this suggestion clears up the uncertainty, as it could also be the case that one or the other of these options is right. Even if it may be possible to “ascribe some meaning” to the disputed limitation, as TVnGO’s reading attempts, more is required: one of ordinary skill must have reasonable certainty. *Nautilus*, 572 U.S. at 911. Here, a person of ordinary skill would encounter two claim phrases without an ordinary meaning in the art. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1345 (Fed. Cir. 2015) (indefinite term had no “plain meaning to one of skill in the art”). Upon consulting the specification, he or she would not find those phrases. *See id.* at 1344 (indefinite term not defined in specification); *Infinity Comput. Prods., Inc. v. Oki Data Ams., Inc.*, 987 F.3d 1053, 1056 (Fed. Cir. 2021) (indefinite term absent from specification). And when attempting to glean their meaning from the patent’s use of “activates” and “activating,” he or she would find that “the patents teach two different results”—i.e., display of IP content associated with an already displayed overlay versus display of an overlay in the first place—without reasonable certainty as to which reading is correct. *TVnGO*, 2020 WL 1899781, at \*3. The asserted ’339, ’945, and ’621 patent claims are therefore indefinite.

## II

We turn next to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the ’220 and ’969 patents. This is an inconsistency between the independent and dependent claims regarding whether an

“overlay activation criterion” comes from the internet or from a user’s premises. On the one hand, the independent claims indicate that an “overlay activation criterion” is a type of “overlay-enabling digital data” that is provided “over the Internet” and “transmitted to the user’s premises.” ’220 patent claims 1, 13; ’969 patent claims 1, 13. But the dependent claims, on the other hand, state that “said overlay activation criterion includes . . . a user command information,” indicating that an “overlay activation criterion” can come from a user’s premises via the remote control. ’220 patent claims 9, 20; ’969 patent claims 9, 20. As the district court explained, “the intrinsic evidence presents . . . irreconcilably inconsistent information: the ’220 and ’969 [p]atents indicate that ‘overlay activation criterion’ comes from the Internet and simultaneously *not* from the Internet—i.e., from the user’s premises.” *TVnGO*, 2020 WL 1899781, at \*3.

For its part, TVnGO asserts that an overlay activation criterion “comes from the Internet,” Reply Br. 3, arguing that, although “‘user commands’ . . . come from a user, not the Internet,” “user command *information*” comes from the internet. Appellant’s Br. 20; *see also* Reply Br. 19 (“There is no dispute that a ‘user command’ comes from a user.”). This distinction lacks intrinsic support. Rather, the specification uses the word “command” only once, and in relation to the infrared (IR) remote control. ’220 patent col. 7 ll. 2–3 (“An IR receiver 28 is adapted to receive IR commands from a remote control unit.”). And when other dependent claims use “command,” they similarly recite “receiving a command from a user at said user premises.” *Id.* at claims 3, 15; ’969 patent claims 3, 15. Accordingly, one of ordinary skill would lack reasonable certainty as to the source of an “overlay activation criterion”—whether the internet or a user’s premises.

TVnGO argues in the alternative that this alleged inconsistency is better characterized as an allegation that the dependent claims are invalid for sweeping more broadly

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than the independent claims. *See* 35 U.S.C. § 112, para. 4. TVnGO misses the mark. The issue is not breadth of the dependent claims but their use of the disputed phrase in a way that contradicts the independent claims. The dependent claims state that “*said overlay activation criterion* includes . . . a user command information,” which conflicts with the independent claim’s use of this same phrase. ’220 patent claims 9, 20 (emphasis added); ’969 patent claims 9, 20 (same). That prevents reasonable certainty.

Further, merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of “overlay activation criterion” in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in “[o]ther claims of the patent in question,” which “can also be valuable sources of enlightenment as to the meaning of a claim term.” *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of “overlay activation criterion” into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that. The asserted ’220 and ’969 patent claims are therefore indefinite.

#### CONCLUSION

The district court also relied on inter-patent inconsistencies. *TVnGO*, 2020 WL 1899781, at \*4–6. We find it unnecessary to reach those, as the intra-patent grounds discussed above are sufficient to establish indefiniteness. We have considered TVnGO’s remaining arguments and find them unpersuasive. The district court correctly concluded that the asserted claims are invalid for indefiniteness. We affirm.

**AFFIRMED**