

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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TCL ELECTRONICS HOLDINGS LTD.  
(f/k/a TCL MULTIMEDIA TECHNOLOGY HOLDINGS, LTD.),  
Petitioner,

v.

MAXELL, LTD.,  
Patent Owner.

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IPR2025-00120  
Patent 10,375,341 B2

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Before TERRENCE W. McMILLIN, JOHN A. HUDALLA, and  
JASON W. MELVIN, *Administrative Patent Judges*.

MELVIN, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review  
35 U.S.C. § 314

## I. INTRODUCTION

TCL Industries Holdings Co., Ltd. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1–4 (all claims) of U.S. Patent No. 10,375,341 B2 (Ex. 1001, “the ’341 patent”). Paper 1 (“Pet.”). Maxell, Ltd., (“Patent Owner”) filed a Preliminary Response. (Paper 6, “Prelim. Resp.”). With our authorization, the parties filed a Preliminary Reply (Paper 7, “Prelim. Reply”) and Preliminary Sur-reply (Paper 8, “Prelim. Sur-reply”). Pursuant to 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a), we have authority to determine whether to institute review.

An *inter partes* review may not be instituted unless “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons set forth below, we conclude that Petitioner has shown a reasonable likelihood it will prevail in establishing the unpatentability of at least one challenged claim, and we institute *inter partes* review.

### A. REAL PARTIES IN INTEREST

Petitioner identifies itself as well as TCL Industries Holdings Co., Ltd.; T.C.L. Industries Holdings (H.K.) Limited; TTE Corporation; TCL Moka International Limited; TCL Moka Manufacturing S.A. De C.V.; TCL King Electrical Appliances (Huizhou) Co., Ltd.; Manufacturas Avanzadas S.A. De C.V.; TCL Smart Device (Vietnam) Co., Ltd.; Shenzhen TCL New Technology Co., Ltd.; TCL Optoelectronics Technology (Huizhou) Co., Ltd.; TCL Overseas Marketing Ltd.; and TCL Technology Group Corporation (f/k/a TCL Corp.) as the real parties-in-interest. Pet. 2. Patent

Owner identifies itself as the real party in interest. Paper 3, 1 (Patent Owner’s Mandatory Notices).

#### B. RELATED MATTERS

The parties identify the following related federal district-court litigation involving the ’341 patent: *Maxell v. TCL et al.*, Case No. 5:23-cv-00108-RWS-JBB (E.D. Tex.) (the “Texas litigation”). Pet. 2; Paper 3, 1.

#### C. THE ’341 PATENT

The ’341 patent is titled “Video Display Apparatus and Terminal Apparatus” and relates to a video-display apparatus that facilitates use by multiple users. Ex. 1001, code (54), 2:19–23. In one example, the ’341 patent describes that it may receive a channel switching command from a device that did not power on the display apparatus. *Id.*, 10:50–54. In that instance, it could transmit status information including the “channel switching notification.” *Id.*

#### D. CHALLENGED CLAIMS

Petitioner challenges claims 1–4 of the ’341 patent. Pet. 1. Claim 1 is independent and is reproduced below:<sup>1</sup>

1. A video display apparatus comprising:
  - [A] a display unit that displays a video content from a broadcast station or from a video content delivery source;
  - [B] a communication unit that executes two types of bidirectional wireless communication including first bidirectional wireless communication with a first

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<sup>1</sup> We include bracketed limitation designations, consistent with Petitioner. Pet. 6–10.

- wireless control device without going via a router and second bi-directional wireless communication via a router with a second wireless control device that is different from the first wireless control device;
- [C] an infrared receiver unit that receives infrared rays from a third wireless control device; and
- [D] a controller that controls the display unit, the communication unit and the infrared receiver unit,
- [E] wherein, if a first command for changing a video content on the display unit from a first video content selected by the first wireless control device to a second video content is transmitted from the second wireless control device to the communication unit via the router during the first video content is displayed on the display unit, the display unit terminates displaying the first video content and starts to display the second video content and the communication unit sends first information for informing termination of the displaying of the first video content to the first wireless control device without going via a router, and
- [F] wherein, if a second command for changing a video content on the display unit from a second video content selected by the second wireless control device to another video content is transmitted from the third wireless control device to the infrared receiver unit by infrared rays during the second video content is displayed on the display unit, the display unit terminates displaying the second video content and starts to display another video content and the communication unit sends second information for informing termination of the displaying of the second video content via the router to the second wireless control device.

Ex. 1001, 26:29–67. Claims 2–4 are also independent and recite limitations similar to claim 1’s. *Id.* at 27:1–28:59; *see* Pet. 6–9.

E. PRIOR ART AND ASSERTED GROUNDS

Petitioner asserts the following ground of unpatentability:

Claim(s) Challenged	35 U.S.C. § <sup>2</sup>	Reference(s)/Basis
1–4	103(a)	Acharya <sup>3</sup>

Pet. 4. Petitioner relies also on the Declaration of Dr. Andrew Wolfe.  
Ex. 1003.

II. ANALYSIS

A. DISCRETIONARY DENIAL

Patent Owner asserts that we should exercise our discretion to deny institution for two reasons. Prelim. Resp. 8–23.

*I. 35 U.S.C. § 314(a)*

Patent Owner requests that we discretionarily deny institution under 35 U.S.C. § 314(a) due to the advanced state of the parallel district-court action. Prelim. Resp. 9–15. In that regard, we consider the factors described in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), and the Chief Administrative Patent Judge’s March 24, 2025, memorandum titled “Guidance on USPTO’s rescission of ‘Interim

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<sup>2</sup> The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), effective March 16, 2013, amended the applicable statutes. Because the application from which the ’815 patent issued claims priority to an application filed before this date, the pre-AIA version of § 103 applies.

<sup>3</sup> U.S. Patent Publication No. 2005/0036509 (Ex. 1004).

Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” (“CAPJ Memo”).<sup>4</sup>

*a. Stay at the district court*

Patent Owner notes that there is no stay of the Texas litigation. Prelim. Resp. 11–12. Patent Owner submits that the Texas court is unlikely to issue a stay given the advanced state of litigation. *Id.*

In general, “[w]e decline to infer, based on actions taken in different cases with different facts, how the District Court would rule should a stay be requested by the parties in the parallel case here.” *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (PTAB May 13, 2020) (informative). Nevertheless, we agree with Patent Owner that the court is less likely to grant a stay after significant case development in the underlying litigation. *See infra* § II.A.1.c. Thus, this factor weighs slightly in favor of discretionary denial.

*b. Litigation Trial Date*

Patent Owner notes that the trial in the underlying litigation is set for September 22, 2025, which is less than four months after the statutory deadline for this Decision and “almost eight months before the projected statutory deadline for a final written decision.” Prelim. Resp. 12–13 (citing Ex. 2004). Accordingly, the trial is currently set to occur several months before any Final Written Decision in this case will issue. Although trial delays are a possibility, there is no evidence before us that would indicate

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<sup>4</sup> Available at [https://www.uspto.gov/sites/default/files/documents/guidance\\_memo\\_on\\_interim\\_procedure\\_recission\\_20250324.pdf](https://www.uspto.gov/sites/default/files/documents/guidance_memo_on_interim_procedure_recission_20250324.pdf).

the likelihood of a trial postponement. Thus, this factor strongly favors discretionary denial.

*c. Investment by the Court and the Parties*

According to Patent Owner, fact discovery in the underlying litigation closed on March 3, 2025, and expert discovery in the underlying litigation closed on May 5, 2025. Prelim. Resp. 13–14 (citing Ex. 2004). The litigation parties have exchanged infringement and invalidity contentions. *See* Prelim. Resp. 13; Ex. 2005 (Petitioner’s invalidity contentions).

Patent Owner also notes that the court has conducted a *Markman* Hearing and issued a claim-construction order. *Id.*; *see* Ex. 2002 (claim construction order). The only claim-construction issue disputed at the district court, however, related to indefiniteness (Ex. 2002, 11–17), which the parties do not raise before us and which we would not address as an unpatentability basis. Thus, the Texas litigation’s investment in claim construction does not represent any overlap with this proceeding.

We agree with Patent Owner that the court and the parties have spent substantial time and effort developing the issues in the underlying litigation. And, of significance to us, this includes contention discovery on invalidity and expert discovery on invalidity. *See Sand Revolution II, LLC v. Continental Intermodal Group–Trucking LLC*, IPR2019-01393, Paper 24 at 10–11 (June 16, 2020) (informative) (noting the significance of case development related to invalidity in a *Fintiv* analysis). These circumstances weigh in favor of discretionary denial.

We also consider whether Petitioner unreasonably delayed in filing this proceeding. *See Fintiv*, Paper 11 at 11–12. Patent Owner notes that Petitioner filed the Petition “at almost a year after the litigation was

commenced.” Prelim. Resp. 15. Patent Owner also notes that “Petitioner knew of th[e] trial date seven months prior to filing the Petition.” *Id.* at 12 (citing Ex. 2003 (setting a trial date in an April 11, 2024, order)). We agree with Patent Owner that the relative lateness of Petitioner’s filing in the statutory period under 35 U.S.C. § 315(b) also weighs in favor of exercising discretion to deny institution. Thus, *Fintiv* factor 3 weighs in favor of exercising discretion to deny institution.

*d. Overlap of the Issues*

Petitioner challenges all four claims here, which matches the claims asserted in the Texas litigation. Prelim. Resp. 14. Petitioner stipulates not to pursue in the Texas litigation “the same grounds or any grounds that could have reasonably been raised before the PTAB.” Pet. 68. Such a *Sotera* stipulation eliminates the substantive overlap between this proceeding and invalidity in the Texas litigation. *See Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 18–19 (PTAB Dec. 1, 2020) (precedential as to § II.A).

This factor weighs strongly against discretionary denial.

*e. Whether Petitioner is Unrelated to the Defendant in the Underlying Litigation*

Petitioner is a defendant in the Texas litigation, which supports discretionary denial.

*f. Other Considerations*

The final *Fintiv* factor is a catch-all that takes into account any other relevant circumstances. *See Fintiv*, Paper 11 at 14–16. We conclude that the Petition presents a particularly strong challenge on the merits, counseling



against discretionary denial. Petitioner's challenge relies on a single prior-art reference, Acharya, and is a straightforward challenge based on the reference's disclosures. Although Petitioner relies on obviousness, that aspect of Petitioner's challenge involves applying Acharya's disclosed behavior in a sequence of scenarios that are consistent with Acharya's disclosures.

Patent Owner's arguments against the merits of Petitioner's challenge are contrary to any natural reading of Acharya and seek to constrain the analysis to one approximating anticipation. They do not show a material weakness in Petitioner's challenge.

Based on the strength of Petitioner's challenge, we conclude that this factor strongly supports institution.<sup>5</sup>

*g. Conclusion on Fintiv*

Based on holistic evaluation of the above factors, we do not discretionarily deny institution. Although work at the district court has progressed and trial there will in all likelihood predate our final written decision, Petitioner's stipulation to avoid overlap between proceedings will simplify the issues in the litigation. And although this proceeding represents only a part of the parties' overall dispute, the claims of the various patents at issue relate to distinct inventions, as shown by the different prior art asserted by Petitioner across multiple petitions challenging those various patents. Finally, the strength of Petitioner's challenge here and the relative weakness of Patent Owner's arguments in opposition show that the overall system

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<sup>5</sup> Patent Owner makes other arguments relative to the catch-all factor of *Fintiv* (Prelim. Resp. 15), but we have already considered those arguments as part of our analysis of other factors above.

efficiency and integrity are best served by instituting this review. Accordingly, we do not discretionarily deny institution in light of the Texas litigation.

2. 35 U.S.C. § 325(d)

Patent Owner proposes that we discretionarily deny institution under 35 U.S.C. § 325(d) because the reference asserted here, Acharya, “is substantially the same as Robbins . . . , art that was previously presented to the Office.” Prelim. Resp. 18 (citing Robbins<sup>6</sup>). Patent Owner notes that Robbins was applied during examination of a parent application to the ’341 patent. *Id.* at 19. According to Patent Owner, “Acharya is substantially the same as Robbins” because: (1) Petitioner’s characterization of Acharya as a “multiple-user display system” is substantially similar to Robbins’s disclosures; and (2) “Petitioner’s contentions regarding Acharya’s dialog boxes are substantially similar to Robbins’s disclosures.” *Id.* at 20–21.

Petitioner points out differences between Acharya and Robbins, in that Robbins discloses Internet Protocol Television (IPTV) media distribution, whereas Acharya discloses a system for multiple users in a meeting to display media on a single display. Prelim. Reply 2. Petitioner asserts further that Robbins lacks the claimed communication path that bypasses the router, which is disclosed by Acharya. *Id.* at 2–3. And Petitioner points out that Acharya describes “the user’s ability to disconnect from the display and pass control to another participant—key to the ‘termination signal’ limitation.” *Id.* at 3.

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<sup>6</sup> U.S. Patent Publication No. 2010/0157978 (Ex. 2006).

Although Patent Owner asserts that Petitioner relies on the knowledge of skilled artisans, rather than Acharya, for a communication path bypassing the router (Prelim. Sur-reply 2), we do not agree. The Petition expressly relies on Acharya's teaching regarding a direct link without a router, which Acharya calls "ad-hoc network link 149." Pet. 30 (quoting Ex. 1004 ¶ 36). Thus, Petitioner identifies a material difference between Acharya and Robbins.

Because Acharya is not substantially the same as prior art previously presented to the office, we do not discretionarily deny institution under § 325(d).

#### B. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner asserts that ordinarily skilled artisans "would have an educational background, such as a Bachelor of Science degree, in Electrical Engineering or Computer Engineering as well as some understanding of Wireless Communications" and "would have 2 years of practical experience in television or video display system development." Pet. 12 (citing Ex. 1003 ¶¶ 50–51). Patent Owner adopts that proposed level of skill in the art. Prelim. Resp. 5–6.

Petitioner's proposed definition appears reasonable and consistent with the asserted prior art and the '341 patent, and we adopt it here.

#### C. CLAIM CONSTRUCTION

Petitioner notes that, in the Texas litigation, Patent Owner asserts that the claimed "communication unit" is a nonce term for construction as a means-plus-function limitation to require a "LAN Communication Unit" with various capabilities for connecting to a router, receiving video content,

and connecting to the terminal apparatus without a router. Pet. 13. Petitioner applies that construction in this proceeding. *Id.* at 13–14. Patent Owner notes that the district court has construed the claims to adopt that means-plus-function construction. Prelim. Resp. 6–7 (citing Ex. 2002, 12–17).

We follow the parties’ agreed construction here, as adopted by the district court. Neither that construction nor any other affects our decision. Thus we do not expressly construe any claim term. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms that . . . are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

To the extent that the scope of a particular claim term impacts a party’s argument during trial, the party should propose an express construction and show how the record supports it.

#### D. OBVIOUSNESS

Acharya is titled “Wireless Presentation System” and relates to interactive management of wireless devices making graphical or video presentations to a display device. Ex. 1004, codes (54), (57). Acharya describes that the multiple computing units like laptops connect to a display unit such as a presentation projector. *Id.* ¶ 7. For such connections, Acharya describes wireless protocols including Wi-Fi, Bluetooth, and infra-red. *Id.* ¶ 51. And it discloses that devices may connect “on an ad-hoc basis,” *Id.* ¶ 36.

With multiple devices sending data to the display unit, the display’s “controller may arbitrate between video data received through” multiple data

links. *Id.* ¶ 12. Although Acharya describes multiple modes for such arbitration, Petitioner relies on Acharya’s “self-serve mode,” which allows multiple users to send video to the display, and the “display system updates the display with the most recently received video data.” *Id.* ¶ 13; *see also* ¶¶ 56–57, 90, Figs. 4, 15–18.

Acharya describes an example use of the self-service multiple-user access mode in which “Jane initially has control over a display device named Projector ABC.” *Id.* ¶ 90. Then, “[a]nother user Bob takes control of Projector ABC from Jane.” *Id.*

When Bob requests control of the projector, Bob’s computing device displays a dialog box 1600 from FIG. 16, informing Bob that “Projector ABC is in Use by Jane,” and that Jane will be disconnected if Bob elects to connect nonetheless. If Bob indicates that he wishes to connect nonetheless, his computing device then displays a message such as a dialog box 1700 in FIG. 17, informing him that he now has control over Projector ABC. At the same time, Jane’s computing device displays a message such as a dialog box 1800 in FIG. 18, informing her that she has lost control over Projector ABC to Bob.

*Id.* Petitioner relies on that exemplary sequence, along with Acharya’s depictions of the dialog boxes from the sequence and other descriptions of the self-serve mode, as showing limitation 1[E] and 1[F]. Pet. 41–51.

Patent Owner contests Petitioner’s reliance on Acharya’s depicted dialog boxes. Prelim. Resp. 24–28. In Patent Owner’s view, the dialog boxes would appear on a user’s device connected to the display device and therefore fail to disclose an action by the projector, as required by the claims. *Id.* at 25.

As Petitioner points out, Acharya discloses a display system that interacts with a wide variety of devices. Ex. 1004 ¶¶ 3, 7–9, 36; *see* Pet. 14–

15. Acharya further discloses that its controller's firmware allows the system to interface with a variety of other devices. Ex. 1004 ¶ 39. That suggests that the communication functionality is largely present in Acharya's display system, not in each user's device. Acharya does in other regards disclose that user devices may run software to display a user interface. *Id.* ¶ 68. Even in such a configuration, however, we understand Acharya's notice regarding a change from one user's content to another as originating from the display system, because the display system is the mediator of switched control and because a first user's computer would have no knowledge of the transferred control without communication from the display system. In particular, Figure 18 depicts a message sent to a first user informing the user that another user has taken control. *Id.* ¶ 90, Fig. 18; Ex. 1003 ¶ 99. Petitioner's expert testimony supports that conclusion and is consistent with Acharya's disclosures. Without information from the display system, the message would not be able to indicate which user took control, as it does. *See* Ex. 1004 ¶ 90, Fig. 18. Thus, we find that Acharya's disclosures support that its display system "sends first information for informing termination" as claimed.

Patent Owner disputes also whether Acharya discloses a message that relates to "termination of the displaying of the first video content." Prelim. Resp. 27. But that position is at odds with Acharya's disclosure that the "display system updates the display with the most recently received video data." Ex. 1004 ¶ 13. Likewise is Patent Owner's argument that Acharya does not disclose the projector terminating displaying first video content and starting to display second video content. Prelim. Resp. 28. In that regard, Patent Owner contends that Acharya's dialog boxes show only what happens

on a user's computer, not on the display system, but paragraph 13 unambiguously discloses that the display system changes what is displayed in response to a request.

Patent Owner asserts that Acharya's "definition of 'control'" distinguishes control from displaying or changing video content. Prelim. Resp. 28. But the portions of Acharya that Patent Owner relies on relate to Acharya's "moderated multiple-user access mode," a different mode of operation from the "self-service multiple-user access mode" that Petitioner relies on. *Compare* Ex. 1004 ¶¶ 90–91, *with id.* ¶¶ 93–95. Acharya's discussion of partial control is inapposite to Petitioner's challenge.

Considering Acharya's paragraphs 13 and 90, Patent Owner submits that they should not be read in conjunction as describing aspects of the same embodiment. Prelim. Resp. 28–30. We do not agree. Paragraph 13 expressly applies to "a self-serve mode" and paragraph 90 expressly applies to "a self-service multiple-user access mode." Ex. 1004 ¶¶ 13, 90. And paragraph 13 appears in Acharya's Summary, while paragraph 90 appears in its Detailed Description of the Preferred Embodiments. *Id.* The strong parallel and conventional use of those sections is consistent with paragraph 13 providing less specific detail but relating to the same aspect of Acharya's invention.

Next, Patent Owner contests whether Petitioner adequately shows Acharya discloses limitation 1[F], relating to a second command to change video content. Prelim. Resp. 30–33. Patent Owner's complaint seems to arise with the actors' names in a hypothetical use of Acharya's invention, because Petitioner's explanations for limitations 1[E] and 1[F] both involve control being transferred to Bob from Jane. *Id.* at 30–31. According to Patent

Owner, it is unable to discern the manner in which Petitioner suggests different embodiments of Acharya should be combined. *Id.* at 31. We do not agree. Petitioner's mapping is straightforward and does not depend on the names given to hypothetical actors. Petitioner asserts an obviousness challenge and the precise sequence claimed need not appear in Acharya. Rather, Acharya describes interactions that encompass those claimed in the '341 patent, and Petitioner explains why the claimed arrangement would have been obvious. Moreover, the system claims require only the capability of certain operations, and Petitioner's assertions show how Acharya discloses the claimed capabilities.

We have reviewed the totality of Petitioner's contentions and supporting evidence and conclude that Petitioner is likely to succeed with unpatentability of claim 1. None of Patent Owner's arguments raises a substantial question as to that conclusion. As to claims 2–4, Patent Owner repeats the same arguments as for claim 1, and we find them unpersuasive for the same reasons discussed above.

### III. CONCLUSION

For the reasons discussed above, we conclude Petitioner has shown a reasonable likelihood of prevailing with respect to at least one claim. We have evaluated all of the parties' submissions and determine that the record supports institution.

This decision to institute trial is not a final decision as to patentability of any challenged claim, or any factual or legal issue underlying patentability. Any final decision will be based on the full record developed during trial. We expressly inform Patent Owner that any argument not asserted in a timely filed Response or another manner permitted during trial



shall be deemed forfeited or waived, regardless of whether the argument was presented in the Preliminary Response.

#### IV. ORDER

Accordingly, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), *inter partes* review of claims 1–4 of the '341 patent is instituted on the grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial commencing on the entry date of this decision.

IPR2025-00120  
Patent 10,375,341 B2

PETITIONER:

Doug Robinson  
Glenn Forbis  
HARNESS IP  
drobinson@hdp.com  
gforbis@hdp.com

PATENT OWNER:

Amanda Bonner  
Robert Pluta  
Saqib Siddiqui  
So Ko  
MAYER BROWN LLP  
astreff@mayerbrown.com  
rpluta@mayerbrown.com  
ssiddiqui@mayerbrown.com  
sko@mayerbrown.com