

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BOE TECHNOLOGY GROUP CO., LTD.,

Petitioner,

v.

OPTRONIC SCIENCES LLC,

Patent Owner.

Case No.: IPR2024-01133

Patent 7,586,509

PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW

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Patent Owner Optronic Sciences LLC (“Patent Owner”) respectfully requests Director Review of the Board’s Final Written Decision (Paper 43) and of the Board’s Order Denying Patent Owner’s Motion to Dismiss for failure to identify all real parties in interest (Paper 42)—including the People’s Republic of China through Beijing Electronics Holdings Co., Ltd. 37 C.F.R. § 42.75(a) permits the Director, in the course of reviewing a final decision, to “review any interlocutory decision rendered by the Board in reaching that decision.”

The Board’s RPI analysis erred in applying the wrong burden in Paper 42, which infected the Final Written Decision, as well as an important issue of law and policy. The Director recently emphasized that the RPI disclosure requirement is a “national-security measure” and that “[t]he integrity of PTAB proceedings depends on knowing who is behind a petition, who funds it, directs it, and/or benefits from it.” Ex. 2032 at 4. Under the Director’s decision in *Yangtze Memory Techs. Co. v. Micron Tech., Inc.*, IPR2025-00098, Paper 38 (Director Jan. 15, 2026) (“*YMTC*”), a petitioner’s “failure to provide clarity as to its actual identity is fatal,” and where RPI identification is “in dispute,” the petitioner bears the burden to show that it identified all RPIs. *YMTC* at 6, 8.

Here, BOE’s own public disclosures establish that BOE’s “actual controller” is Beijing Electronics Holdings Co., Ltd. (“BEH”), a “[l]ocal institution for state-owned assets management” whose principal activity is the “[o]peration and

management of state-owned assets within authorization.” Ex. 2036 at 111. BOE also discloses contractual arrangements under which a state-owned BOE shareholder has transferred management and voting-related rights to BEH, and discloses BEH-assigned and BEH-affiliated personnel on BOE’s board and supervisory committee, who receive their remuneration exclusively from BEH. *Id.* at 61–62, 112–13.

That record evidence is more than sufficient to put BOE’s RPI identification into dispute. Yet the Board denied dismissal based on (i) BEH’s small direct equity stake, and (ii) generalized “independence” statements and a three-page declaration from BOE’s in-house counsel that does not address the voting protocols, the acting-in-concert agreement, or the interlocking personnel identified in BOE’s own Annual Report. Paper 42 at 7–10; Ex. 1023. The Board did not grapple with BOE’s disclosed control arrangements and misapplied the RPI framework.

Patent Owner therefore requests that the Director: (1) grant Director Review; (2) vacate the Final Written Decision (Paper 43) and Paper 42; (3) dismiss the Petition as not in condition for consideration under 35 U.S.C. § 312(a)(2); and (4) terminate this IPR.

I. THE LEGAL LANDSCAPE HAS FUNDAMENTALLY CHANGED

Paper 42 was issued during a series of Director actions that changed the RPI enforcement standard. The Board applied a framework that the Director has since dismantled. Because Director Review constitutes a *de novo* exercise of the Director’s

authority over questions of law and policy, the Director applies current precedent, not the framework that existed when the Board ruled.

SharkNinja de-designation (Sept. 26, 2025). Director Squires de-designated *SharkNinja Operating LLC v. iRobot Corp.*, IPR2020-00734, Paper 11 (P.T.A.B., Oct. 6, 2020), as precedential, which eliminated the primary basis on which petitioners with deficient RPI disclosures avoided scrutiny. *See* Ex. 2032 at 1.

Corning Optical restored (Oct. 28, 2025). The Director designated *Corning Optical Commc'ns RF, LLC v. PPC Broadband, Inc.*, IPR2014-00440, Paper 68 (P.T.A.B., Aug. 18, 2015) (“*Corning*”) as precedential. Ex. 2032. The accompanying memorandum framed accurate RPI identification “not merely as a procedural safeguard, but as a national-security measure.” *Id.* The Director warned that “opaque investment structures” have been exploited by foreign adversaries and that “state-linked entities” have “covertly financed or directed U.S. patent challenges” in sectors such as “semiconductors, artificial intelligence, quantum computing, and advanced materials.” *Id.*

YMTC vacatur (Jan. 15, 2026). Three days after Paper 42, the Director vacated institution in *YMTC*, holding that “Petitioner’s failure to provide clarity as to its actual identity is fatal to its petitions.” *YMTC* at 3, 6. The Director applied *Corning’s* burden-shifting framework: the patent owner must produce evidence “sufficient to put into dispute whether the Petitions identified all RPIs;” the burden

then shifts to the petitioner. *Id.* at 7. The vacatur rested on the petitioner’s failure to meet its RPI burden under § 312(a)(2). *Id.* at 2 n.2.

Proppant/Adello de-designation (Feb. 3, 2026). The Director de-designated *Proppant Express Investments v. Oren Technologies*, IPR2017-01917, Paper 86 (P.T.A.B., Feb. 13, 2019), and *Adello Biologics v. Amgen*, PGR2019-00001, Paper 11 (P.T.A.B., Feb. 14, 2019), eliminating the four-factor balancing test that had permitted petitioners to retroactively cure deficient RPI disclosures while retaining their original filing date.¹

Taken together, these actions establish that every petition before the Office must identify all RPIs, that the burden shifts to the petitioner once Patent Owner puts RPI identification in dispute, and that deficiencies cannot be retroactively cured. The Board’s analysis is irreconcilable with this framework.

II. RECORD EVIDENCE PLACING RPI INTO DISPUTE

A. BOE Identifies BEH as Its “Actual Controller” and a State-Owned Assets Manager

BOE’s 2024 Annual Report (Ex. 2036) identifies BEH as BOE’s “Actual Controller.” Ex. 2036 at 111–12. BOE discloses that the “Nature of the actual controller” is a “[l]ocal institution for **state-owned** assets management,” and that

¹ <https://www.uspto.gov/subscription-center/2026/uspto-de-designates-two-decisions-involving-real-party-interest>.

BEH's principal activity is "operation and management of **state-owned** assets within authorization." Ex. 2036 at 111 (emphasis added).

Under Article 265 of the Company Law of the People's Republic of China, an "actual controller" is defined as the entity exercising *de facto* dominant control over a company through "investment relations, agreements, or other arrangements." Ex. 2038 at 2; *see also* Ex. 2039 at 1–3; Ex. 2037 at 6. By identifying BEH as its actual controller in audited financial filings, BOE has conceded under its own governing law that BEH exercises *de facto* dominant control over BOE.

The legal significance of this designation is concrete. Under BOE's governing law, an actual controller is the entity that can "exert decisive influence over the company's management decisions, financial policies, operational strategies, and appointment of key personnel." Ex. 2039 at 3. Each of these categories of authority bears directly on the *Corning* inquiry. An entity that controls a company's "management decisions" and "financial policies" has control over funding for IPRs and decision authority over them. An entity that controls "operational strategies" can direct whether patent challenges are pursued. An entity that appoints "key personnel" can install decision-makers who will execute its preferred litigation strategy. This is the very definition of an entity that "could have exercised control over a party's participation in a proceeding." *Corning* at 14.

B. BOE Discloses Contractual Voting and Management Arrangements

BOE also identifies major shareholders that are “state-owned legal person[s],” including Beijing State-owned Capital Operation and Management Company Limited (“BSCOM”), which holds 10.79% of BOE’s shares. Ex. 2036 at 107.

Critically, BOE discloses formal arrangements under which BSCOM “handed over 70% of the shares directly held by it to [BEH] for management through Stock Management Protocol, and [BEH] gained the incidental shareholders’ rights except for disposing right and usufruct of the shares, of which the rest 30% voting right maintained unanimous with [BEH] through the agreement according to Implementation Protocol of Voting Right.” Ex. 2036 at 113. BOE separately discloses that “Beijing Jing Guorui Soe Reform and Development Fund (L.P.) signed the Acting-in-Concert Agreement with [BEH]” during BOE’s non-public issuance in 2021. *Id.* at 112–13.

This proves BEH is not a passive investor in BOE. BEH has express contractual mechanisms for consolidating shareholder and voting power—precisely the sort of agreement-based control that makes an entity an “actual controller” under Chinese Company Law and an RPI under *Corning*. BEH used its consolidated voting power to influence BOE’s board composition—the same board that oversees BOE’s strategic decisions, including its litigation strategy.

C. BOE Discloses BEH-Affiliated Directors and Supervisors (Interlocking Personnel)

The Board credited BOE's assertion that it is "completely independent in labor, staff and remunerations." Paper 42 at 8–9 (quoting Ex. 2036 at 46). But the same Annual Report (Ex. 2036 at 61–62) discloses *six BOE officers who simultaneously hold positions at BEH or its affiliated state-owned entity and receive remuneration from those entities:*

Director Guo Chuan serves as Deputy Secretary of the Party Committee and Director and General Manager of BSCOM, the state-owned entity that transferred its shares to BEH for management. *Id.* at 57, 61.

Director Ye Feng is identified as a "Full-time Director Dispatched" by BEH and receives remuneration from BEH. *Id.* at 57, 62.

Director Jin Chunyan serves as Director of the Investment Management Department of BEH and receives remuneration from BEH. *Id.* at 58, 62.

Supervisory Committee Chairman Wang Jin serves as General Counsel of BEH and receives remuneration from BEH. *Id.* at 59, 62.

Supervisor Song Ligong serves as Director of the Financial Management Department of BEH and receives remuneration from BEH. *Id.* at 62.

Supervisor Wei Shuanglai serves as Director of the Safety and Environmental Protection Department of BEH and receives remuneration from BEH. *Id.* at 59, 62.

These are BOE's own admissions in the exhibit that was cited by the Board. The remuneration table in Ex. 2036 at 62–63 confirms the pattern: every director and supervisor who holds a concurrent position at BEH or BSCOM ***received RMB 0.00 in total remuneration from BOE*** during the reporting period, with “Yes” recorded under “Any remuneration from related party.” *Id.* at 62–63. These individuals are BEH employees serving on BOE's board and supervisory committee. Their financial compensation comes from BEH, not from BOE; they do not independently work for BOE and are not independently compensated by BOE.

The independence statement that the Board relied on opens with the general, unqualified representation that BOE is “completely independent in labor, staff and remunerations” (*Id.* at 46)—a claim that makes no distinction between executive management, directors, and supervisors. The concurrent-positions table in that same exhibit directly contradicts the general representation that the Board relied on. A company whose directors (1) are dispatched by, (2) hold concurrent positions at, and (33) receive their entire compensation from the state-owned actual controller is “intertwined” with that controller in precisely the way *Corning* found significant. *Corning* at 17–23 (discussing blurred corporate boundaries and overlapping personnel). The Board's conclusion that the evidence showed “the opposite” of *Corning* (Paper 42 at 9) cannot stand.

Moreover, BOE cannot maintain “independent financial departments” (Ex. 2036 at 46) when its Supervisory Committee member overseeing financial matters (Song Ligong) is simultaneously the head of financial management at BEH. *Id.* at 59. This is yet another a facial contradiction within the same exhibit.

D. The Intel/Micron “Passive Investor” Analogy Fails on the Record

BOE argued that BEH’s role is analogous to the U.S. government’s investment in Intel or Micron. Paper 39 at 2. The record wholly refutes this analogy. The Intel Press Release (Ex. 1026 at 2) is clear that the U.S. government’s stake involves “passive ownership, with no Board representation or other governance or information rights.” Not so for BOE.

E. Congressional Findings Put the RPI into Dispute

A December 18, 2024 letter from the U.S. House Select Committee on the Chinese Communist Party to the U.S. International Trade Commission (Ex. 2034) states that “the PRC has groomed BOE as its national champion in the display industry” and identifies “the national security risk posed by BOE.” *Id.* at 1–2. The letter further states that “BOE directly supplies displays to the People’s Liberation Army (PLA) and operates out of a ‘military-civil fusion enterprise zone’”. *Id.* It warns that BOE’s “growing dominance in the display industry will leave the United States overly reliant on the PRC for an advanced technology critical to military

applications.” *Id.* Under *YMTC*, statements from U.S. lawmakers characterizing a petitioner as state-backed suffice to put the RPI into dispute. *YMTC* at 6–7.

The Board dismissed this letter as merely showing that the Chinese government “may be a customer of BOE and may provide some unspecified support.” Paper 42 at 6. That characterization misreads the letter, which does not describe a customer relationship but describes the PRC “grooming” BOE as a “national champion” through “state-sponsored subsidization” and operating BOE in a “military-civil fusion enterprise zone”—language that characterizes state direction and strategic control, not arm’s-length commerce. Ex. 2034 at 1.

III. THE BOARD’S RPI ANALYSIS CONFLICTS WITH CORNING, THE DIRECTOR’S MEMORANDUM, AND YMTC

A. The Board Applied the Wrong Burden-Shifting Standard

In Paper 42, the Board concluded that the record did not “even put in dispute that the Chinese government exercises or could exercise the kind of control that would be necessary to make it an RPI of Petitioner.” Paper 42 at 6. But the relevant question under *YMTC* is not whether Patent Owner proved actual control—it is whether the record evidence is “sufficient to put into dispute whether the Petitions identified all RPIs.” *YMTC* at 7. The Director found that threshold satisfied even “[r]egardless of whether the foreign government is in fact an RPI.” *Id.*

The Board conducted a single-step analysis, crediting BOE’s declaration and generalized independence statements without requiring BOE to demonstrate that it

had identified all RPIs. Under *YMTC*, once Patent Owner’s evidence put the RPI identification into dispute, BOE bore the burden to “bring forth evidence or arguments demonstrating that it named all RPIs.” *YMTC* at 8. BOE has not done so.

B. The Zhang Declaration (Ex. 1029) Does Not Carry BOE’s Burden

BOE’s principal evidence of independence is a three-page declaration from Yongqi Zhang, an IP Counsel at BOE. Ex. 1023. The declaration’s operative testimony is a single paragraph that tracks boilerplate from the Annual Report’s independence section and adds the bare assertion that “[BEH] does not fund, direct, or control these IPR petitions or proceedings.” *Id.* ¶ 5.

This declaration is insufficient to carry the petitioner’s burden under *YMTC* for several reasons. Mr. Zhang does not address the Voting Rights Implementation Protocol or the Stock Management Protocol that consolidate shareholder voting power in BEH. He does not address the Acting-in-Concert Agreement. He does not explain how BOE’s board—which includes BEH-dispatched directors—makes litigation decisions, or whether BEH has ever been consulted about BOE’s litigation strategy against Patent Owner. He does not address why every director and supervisor who serves concurrently at BEH receives zero remuneration from BOE. In *YMTC*, the Director was unimpressed by a petitioner that “argu[ed] what it is not,” rather than providing clarity about what it is. *YMTC* at 5. Mr. Zhang’s declaration

follows the same pattern—it denies control in conclusory terms while ignoring the structural mechanisms through which BEH exercises influence.

C. The Board Failed to Address Material Record Evidence

Paper 42 does not address the Stock Management Protocol, the Voting Rights Implementation Protocol, the Acting-in-Concert Agreement, or the six BEH-affiliated officers identified above. The Board’s analysis instead treated BEH’s direct ownership percentage as dispositive and relied on a generic “independence” statement from a section of Ex. 2036 that is facially contradicted by the personnel tables in the same exhibit. *See* Section II.C, *supra*. This reflects a misapprehension of material record evidence.

D. The “Independence” Disclosure Presupposes the Control It Purports to Deny

Chinese Company Law imposes duties and potential liability on controlling shareholders and actual controllers (including those who do not serve as directors or senior managers) when they use their influence to cause directors or senior management to violate the law or harm the company’s interests. Ex. 2037 at 5–6. BOE’s corporate-governance “independence” statement cannot negate BOE’s own disclosure that BEH is its actual controller (Ex. 2036 at 111–12) with the other indicia of BEH’s influence over BOE’s share voting and management arrangements. *See* Sections II.B and II.C, *supra*. BOE reports to its shareholders under a legal framework that presupposes BEH’ decisive influence over BOE’s management

decisions and personnel appointments but tells the PTAB that BEH has no ability to influence BOE's litigation decisions.

The interpretation of Article 265 and the legal significance of the "actual controller" designation are questions of foreign law. Under 37 C.F.R. § 42.62(d), in determining foreign law, "the Board may consider any relevant material or source, including testimony, whether or not submitted by a party or admissible under the Federal Rules of Evidence." Patent Owner respectfully requests the Director to consider the legal meaning of the "actual controller" designation under the Chinese Company Law that governs BOE's corporate existence.

IV. BOE'S THRESHOLD DEFENSES DO NOT EXCUSE ITS RPI DEFECT

A. Patent Owner Did Not Waive Its RPI Challenge

Patent Owner raised the RPI issue by motion to dismiss (Paper 38) promptly after the Director issued the October 28, 2025 Memorandum elevating RPI transparency and designating Corning as precedential. *See* Ex. 1031. Further, RPI identification under § 312(a)(2) is a statutory prerequisite, not a waivable procedural objection. The statute provides that a petition may be considered "only if" it identifies all real parties in interest. 35 U.S.C. § 312(a)(2). In *YMTC*, the Director addressed the RPI deficiency on review even though the Board had declined to reach it, confirming that this statutory requirement is not subject to either waiver or forfeiture at the Board level. *YMTC* at 6–8. Moreover, the Director's review

authority under 37 C.F.R. § 42.75 is a *de novo* exercise of the Office’s authority over whether a petition is in condition for consideration. The question is whether the petition satisfies § 312(a)(2).

B. BOE’s Treaty Argument Fails

BOE argued that identifying a state-linked entity as an RPI would violate “national treatment” under TRIPS and the Paris Convention. Paper 39 at 2. Those treaties do not bar generally applicable procedural requirements in U.S. administrative adjudications. The Paris Convention expressly provides that “the laws of each of the countries of the Union relating to judicial and administrative procedure . . . are expressly reserved.” Paris Convention, Art. 2(3) (Ex. 1029). The RPI disclosure requirement applies equally to all petitioners, foreign and domestic. 35 U.S.C. § 312(a)(2); 37 C.F.R. § 42.8(b)(1).

C. The Entity List Distinction Does Not Resolve the RPI Question

Patent Owner acknowledges that BOE Technology Group Co., Ltd. is not the entity named “BOET” on the BIS Entity List. But this is not dispositive for the RPI analysis. In *YMTC*, the final vacatur did “not rely on that [BIS] listing” but on Petitioner’s failure to meet its burden under § 312(a)(2). *YMTC* at 2 n.2. The same analysis applies here: BOE’s own corporate disclosures, voting protocols, and interlocking personnel independently put RPI into dispute.

V. FAILURE TO NAME ALL RPIs CAUSES IRREPARABLE PREJUDICE

The core legislative function of § 312(a)(2) is to ensure the proper application of statutory estoppel under 35 U.S.C. § 315(e). This concern is not abstract. If BEH and other state-affiliated entities remain unnamed, they remain entirely outside the estoppel net. The Director recognized this danger in *YMTC*: “Only precisely-identified real parties in interest are entitled to have their petitions considered.” *YMTC* at 5.

VI. CONCLUSION

The IPR system should not serve as a vehicle for foreign state-controlled enterprises to undermine U.S. patents through undisclosed affiliations. The policy concerns here mirror those in *YMTC*, including protecting the public interest (*YMTC* at 7) and noting that the sovereign nature of a petitioner’s actual controller bears on whether the Office’s proceedings are consistent with their intended purpose (*id.* at 4 n.3). Here, BOE’s own disclosures establish that its actual controller is a state-owned entity exercising agreement-based voting control and placing its own personnel on BOE’s board and supervisory committee—the very “[o]paque investment structures” that “invite[] exploitation” and “undermine public confidence in the integrity of the patent system.” Ex. 2032 at 2, 4. Accordingly, Patent Owner respectfully requests that the Director vacate Papers 43 and 42, and terminate this IPR.

Date: February 25, 2026

Respectfully submitted,

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on February 25, 2026, by filing this document through the Patent Trial and Appeal Board End to End system as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioner:

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