

2024-2148

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

CHIAN CHIU LI,
Appellant,

v.

APPLE INC.,
Appellee.

Appeals from the United States Patent and Trademark Office,
Patent Trial and Appeal Board in No. IPR2023-00560

**COMBINED PETITION OF APPELLANT CHIAN CHIU LI
FOR PANEL REHEARING AND REHEARING EN BANC**

Chian Chiu Li
5773 Tan Oak Drive
Fremont, CA 94555
Tel: (408) 417-0455
Pro Se Appellant

June 23, 2025

TABLE OF CONTENTS

TABLE OF AUTHORITIES	ii
FEDERAL CIRCUIT RULE 35(b) STATEMENT	1
POINTS OF LAW OVERLOOKED OR MISAPPREHENDED	2
INTRODUCTION	2
BACKGROUND	3
I. The '564 Patent	3
II. The Cited Prior Art	4
III. The Final Written Decision	6
IV. The Panel Decision	6
ARGUMENT	7
I. The panel decision conflicts with precedent regarding negative limitation	7
II. The panel decision conflicts with precedent by reading into the prior art reference	9
CONCLUSION	10
ADDENDUM	
CERTIFICATE OF COMPLIANCE	

TABLE OF AUTHORITIES

Cases

<i>AC Technologies S.A. v. Amazon.com, Inc.</i> , 912 F.3d 1358 (Fed. Cir. 2019)	1, 2, 8
<i>Continental Can Co. USA v. Monsanto Co.</i> , 948 F.2d 1264 (Fed. Cir. 1991)	1, 3, 10
<i>Motorola, Inc. v. Interdigital Tech. Corp.</i> , 121 F.3d 1461 (Fed. Cir. 1997)	1, 2, 10
<i>Novartis Pharms. Corp. v. Accord Healthcare, Inc.</i> , 38 F.4th 1013 (Fed. Cir. 2022)	1, 2, 3, 8, 10
<i>Santarus, Inc. v. Par Pharm., Inc.</i> , 694 F.3d 1344 (Fed. Cir. 2012)	8
<i>Siid-Chemie, Inc. v. Multisorb Techs., Inc.</i> , 554 F.3d 1001 (Fed. Cir. 2009)	9

Other Authorities

Manual of Patent Examining Procedure (MPEP) § 2173.05(i)	8
--	---

FEDERAL CIRCUIT RULE 35(b) STATEMENT

Based on my professional judgment, I believe the panel decision is contrary to the following precedents of this Court:

- *Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013 (Fed. Cir. 2022);
- *AC Technologies S.A. v. Amazon.com, Inc.*, 912 F.3d 1358 (Fed. Cir. 2019);
- *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461 (Fed. Cir. 1997);
- *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264 (Fed. Cir. 1991).

Based on my professional judgment, I believe this appeal requires an answer to the precedent-setting questions of exceptional importance:

1. Whether a prior art reference needs to include a written description to disclose a negative limitation, or whether silence constitutes such a disclosure.
2. Whether the panel may interpret a prior art reference by converting an “after” limitation (sequential) into an “only after” limitation (exclusive sequential) without supporting evidence or a reasoned rationale.

Date: June 23, 2025

/s/ Chian Chiu Li

Appellant

POINTS OF LAW OVERLOOKED OR MISAPPREHENDED

First, the panel overlooked *Novartis*, which holds that “[w]hile a negative limitation need not be recited in the specification in haec verba, there generally must be something in the specification that conveys to a skilled artisan that the inventor intended the exclusion, such as a discussion of disadvantages or alternatives”. *Novartis*, 38 F.4th 1013, 1017 (Fed. Cir. 2022).

Second, the panel misapprehended *AC Technologies* in holding that a prior art reference need not present or explain a feature’s absence in order to disclose a negative limitation. *AC Technologies S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1366-1367 (Fed. Cir. 2019).

Third, the panel overlooked *Motorola* in reading into a prior art reference. *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1473 (Fed. Cir. 1997).

INTRODUCTION

Disclosure is the hallmark of invention and serves as the foundation of patent law. “Silence is generally not disclosure.” *Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013, 1017 (Fed. Cir. 2022). Whether concerning a positive limitation or negative limitation, it is a written description that provides disclosure, while silence creates a void. “If silence were generally sufficient, all negative limitations would be supported by a silent specification.” *Id.*

Without explanation or supporting evidence, the panel held that a prior art reference needs not state a feature's absence in order to disclose a negative limitation.

Evidence for missing descriptive matter “must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991). Yet without providing such evidence or essential rationale, the panel converted an “after” limitation disclosed in the prior art into an “only after” limitation not disclosed in the prior art and held that the prior art nonetheless discloses the “only after” limitation.

The panel decision conflicts with precedent, creates confusion regarding negative limitation, and reads too much into the prior art reference. The legal errors are fundamental. Rehearing by the panel or en banc Court should be granted.

BACKGROUND

I. The '564 Patent

This appeal arises from IPR2023-00560 (“Petition”) filed by Apple, Inc. (“Apple”) on February 7, 2023 challenging the patentability of U.S. Patent No. 11,016,564 B2 (“the '564 Patent”). Appx0018-0031. The '564 Patent discloses

methods for presenting information to a user at an electronic device such as a smartphone. Appx0025(2:29-41).

The device includes a sensor 10 to detect the user's gaze direction, a sensor 20 to detect the user approaching the device, and a sensor 24 to detect movement, such as shaking of the device. Appx0026(3:65-4:28). The user's gaze direction is detected and used to provide an easy, convenient, and secure method for unlocking the device and displaying information. Appx0027(6:61-7:2). Gaze detection is performed after the user approaches the device (i.e., a proximity event) or moves the device (e.g., by shaking it). Appx0027(6:32-37; 6:58-66). When gaze detection is performed only after a given act that involves physical contact with, or physical movement of, the device ("Given Act") is detected, i.e., when the proximity event is excluded, it saves energy and prevents privacy leaks. Appx0028(7:9-12).

Independent claims 1, 8, and 14 of the '564 Patent each recite a limitation requiring that gaze detection be performed only after detecting the Given Act. This limitation may be referred to as the "only after" limitation.

II. The Cited Prior Art

1. U.S. Patent No. 10,540,013 ("Ryu")

Ryu discloses a device 100 with a sensor 101. Appx0600(4:63-65). The sensor 101 detects a movement such as a rotational movement of the device 100.

Appx0601(6:61-64). Aside from the sensor 101, Ryu is silent on whether the device 100 has any other sensors. When a user rotates the device 100 by a certain number of degrees, functions of a front camera 821 are activated.

Appx0608(19:51-59). When it is determined that the user looks at the device 100 (i.e., gaze detection is performed), the device 100 executes a task.

Appx0608(19:30-34).

Thus, Ryu discloses performing gaze detection after detecting a rotational movement, which may be referred to as the “after” limitation. The rotational movement may be viewed as a movement trigger for performing gaze detection. Ryu is silent on any other trigger for gaze detection and silent on the “only after” limitation.

Furthermore, because Ryu is silent on any other triggers (besides the movement trigger) or any other sensors (besides the sensor 101) that could support other triggers, it has no need, motivation, and intent to exclude other triggers. The “only after” limitation excludes other triggers. Therefore, Ryu has no use, need, motivation, or intent to configure or implement the “only after” limitation to exclude nonexistent other triggers. As noted, the other triggers may raise privacy and power consumption concerns.

2. U.S. Patent Publication No. 2010/0079508 (“Hodge”) and U.S. Patent No. 8,331,992 (“Stallings”)

Both Hodge and Stallings are silent on performing gaze detection only after detecting the Given Act. The Final Written Decision in IPR2023-00560 (“Final Decision”) by the Patent Trial and Appeal Board (the “Board”) did not find Hodge or Stallings discloses performing gaze detection only after detecting the Given Act.

III. The Final Written Decision

With regard to Ryu’s method, the Board found the device 100 includes the sensor 101 for detecting movement and does not include a proximity sensor. Appx0008-0009, 0011. Without providing any supportive evidence or rationale, the Board stated it agreed with Apple’s assertion that Ryu discloses a device that triggers gaze detection only after sensing physical movement. Appx0012.

Apple’s assertion relies on its expert, Dr. Bederson, who offered conclusory testimony contending Ryu discloses the “only after” limitation. Appx0061, Appx0477(¶59). However, Dr. Bederson failed to provide any evidence or rationale explaining how and why Ryu discloses the “only after” limitation. Appx0477(¶59). The Board erred in adopting Apple’s anticipation assertion, which was based on unsupported, conclusory testimony.

IV. The Panel Decision

In affirming the Board’s Final Decision, the panel held that “[t]o the extent that Mr. Li contends that “only after” is akin to a negative limitation, prior art references “need not state a feature’s absence in order to disclose a negative

limitation.’” Op.4. The panel’s holding - that disclosing a negative limitation does not require stating a feature’s absence, and doing so without explanation - is clearly erroneous and conflicts with this Court’s precedent.

The panel also misapprehends *AC Technologies* by quoting only a brief excerpt without addressing the surrounding context. This creates confusion regarding negative limitation and leads to a misinterpretation of *AC Technologies*.

Additionally, the panel held that “[g]iven that the primary embodiment’s device triggers gaze detection after motion is detected and features no other triggers, a fact finder could reasonably conclude that a skilled artisan would read Ryu’s preferred embodiment as performing gaze detection only after motion is detected.” Op.5. This, too, is erroneous and conflicts with this Court’s precedent, as the panel plainly read into Ryu’s disclosure. Moreover, the panel’s factual finding defies logic and creates a non sequitur.

ARGUMENT

I. The panel decision conflicts with precedent regarding negative limitation

As noted above, Ryu does not disclose or provide any support for the “only after” limitation. Nonetheless, the panel held that Ryu discloses this limitation because a negative limitation needs not expressly state the absence of a feature. This holding clearly conflicts with precedent from this Court and with the MPEP.

The MPEP states “[a]ny negative limitation or exclusionary proviso must have basis in the original disclosure” and “[t]he mere absence of a positive recitation is not basis for an exclusion.” MPEP § 2173.05(i). Similarly, in *Santarus*, the Court held: “Negative claim limitations are adequately supported when the specification describes a reason to exclude the relevant limitation.” *Santarus, Inc. v. Par Pharm., Inc.*, 694 F.3d 1344, 1351 (Fed. Cir. 2012). Further, *Novartis* emphasized: “While a negative limitation need not be recited in the specification in haec verba, there generally must be something in the specification that conveys to a skilled artisan that the inventor intended the exclusion, such as a discussion of disadvantages or alternatives”. *Novartis*, 38 F.4th 1013, 1017 (Fed. Cir. 2022).

The panel quoted a portion of *AC Technologies*, stating that “prior art references “need not state a feature’s absence in order to disclose a negative limitation.”” Op.4. However, the panel failed to acknowledge that *AC Technologies* included a prior paragraph explaining that the negative limitation is already disclosed, though not explicitly: “The Board found that Rabinovich discloses this limitation because neither cnt(s, xs) nor cnt(E, xs) requires access of Rabinovich’s host ... Substantial evidence supports the Board’s finding.” *AC Technologies S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1366-1367 (Fed. Cir. 2019).

The panel also cited *Süd-Chemie* in support of its view on negative limitation. Op.5. Again, the panel misapprehended this Court’s precedent. *Süd-Chemie* explained that the limitation is already disclosed: “*Komatsu* plainly teaches that containers can be made of films that are heat sealed without the use of adhesives, and thus without coatings.” *Süd-Chemie, Inc. v. Multisorb Techs., Inc.*, 554 F.3d 1001, 1004 (Fed. Cir. 2009).

By quoting portions of *AC Technologies* and *Süd-Chemie* without providing necessary context, the panel misinterpreted precedent and, more importantly, introduced confusion regarding negative limitation.

The panel’s holding on negative limitation is fundamentally flawed and detrimental. If not reversed, the case should be reheard en banc.

II. The panel decision conflicts with precedent by reading into the prior art reference

As previously noted, the panel held that “a skilled artisan would read Ryu’s preferred embodiment as performing gaze detection only after motion is detected” because the device has only one sensor to detect motion. Op.5. This statement contains a logical flaw and invalid causation, as the “only after” limitation does not necessarily follow from the mere fact that a device includes only one sensor. The panel assumed causality without justification.

Without evidence or essential rationale, the panel converted Ryu’s “after” limitation into the “only after” limitation. However, “missing descriptive matter must necessarily be present in the . . . specification such that one skilled in the art would recognize such a disclosure” (citing *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991)). *Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013, 1017 (Fed. Cir. 2022). The panel decision directly conflicts with *Novartis*.

Moreover, experts may not “read into the prior art reference teachings that are not there.” *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1473 (Fed. Cir. 1997). By holding that Ryu discloses the “only after” limitation through such inference, the panel read into the prior art reference, in clear conflict with *Motorola*.

CONCLUSION

The Court should grant the petition.

Respectfully submitted,

Date: June 23, 2025

/s/ Chian Chiu Li

Chian Chiu Li

Appellant

ADDENDUM

NOTE: This disposition is nonprecedential.

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

CHIAN CHIU LI,
Appellant

v.

APPLE INC.,
Appellee

2024-2148

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. IPR2023-
00560.

Decided: June 9, 2025

CHIAN CHIU LI, Fremont, CA, pro se.

STEPHEN DESALVO, Kirkland & Ellis LLP, Washington,
DC, for appellee. Also represented by JOHN C. O'QUINN.

Before PROST, REYNA, and CHEN, *Circuit Judges*.

PER CURIAM.

Chian Chiu Li, proceeding pro se, appeals the Final Written Decision of the Patent Trial and Appeal Board (Board), holding claims 1–6, 8–12, 14–16, and 18–20 of U.S. Patent No. 11,016,564 (’564 patent) unpatentable under 35 U.S.C. § 103. *See Apple Inc. v. Li*, No. IPR2023-00560, 2024 WL 2750500, at *7 (P.T.A.B. May 29, 2024) (*Final Decision*). For the following reasons, we *affirm*.

BACKGROUND

Apple Inc. (Apple) filed a petition for *inter partes* review, alleging that the challenged claims of the ’564 patent were unpatentable under § 103 based on combinations of U.S. Patent No. 10,540,013 (Ryu), U.S. Patent Application Publication No. 2010/0079508 (Hodge), and U.S. Patent No. 8,331,992 (Stallings). *Id.* at *1–2.

The ’564 patent is titled “System and Method for Providing Information” and relates to presenting information on an electronic device when the device senses that it has been moved and detects that a user is looking at the screen. *See, e.g.*, ’564 patent at Abstract. The specification discloses that, to save energy, “a gaze sensing system may be off most of the time unless getting activated upon receiving shaking signals.” *Id.* col. 7 ll. 10–12. Claim 1 recites:

A method for presenting information at an electronic device, comprising:

- 1) detecting an act made by a user involving physical contact with the electronic device or physical movement of the electronic device when a display of the electronic device has an idle screen or a screen in standby mode, inactive mode, or screen-saver mode;
- 2) performing gaze detection *only after* detecting the act;
- 3) ascertaining whether the user looks at a direction toward the electronic device;

- 4) determining whether the user is recognized via a recognition mechanism; and
- 5) presenting a plurality of content items when the user is recognized via the recognition mechanism and it is ascertained that the user looks at a direction toward the electronic device.

Id. at claim 1 (emphasis added).

The Ryu reference discloses a process that begins with a device in standby mode; when a user rotates the device by 180 degrees, a processor activates the device’s camera to determine whether a user is looking at the device. Ryu col. 19 ll. 49–67.

Before the Board, Mr. Li acknowledged that “Ryu detects an act by the movement sensor and uses the act as a trigger for gaze detection,” *Final Decision*, 2024 WL 2750500, at *5 (citation omitted), but argued that Ryu “does not exclude performing gaze detection after detecting an event using proximity information” and, thus, Ryu “does not disclose [that] gaze detection is performed only after detecting [movement of the device].” J.A.¹ 171 (emphases omitted).

The Board found that Ryu discloses “a device entering active mode after performing gaze detection subsequent to physical movement of the device.” *Final Decision*, 2024 WL 2750500, at *3. The Board reasoned that because other embodiments in Ryu’s specification describe sensors other than motion sensors, but Ryu’s primary embodiment is silent as to such sensors, Ryu’s primary embodiment does not include such alternative approaches for triggering gaze detection. *See id.* at *5. The Board, therefore, concluded that “Ryu discloses a device that triggers gaze detection

¹ “J.A.” refers to the joint appendix filed along with the parties’ briefing.

only after the device senses physical movement.” *Id.* Concluding that Apple’s asserted grounds taught the uncontested limitations, the Board held that the challenged claims were unpatentable under 35 U.S.C. § 103. *Id.* at *6. Mr. Li appeals, and we have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

A

Obviousness is a question of law based on underlying facts. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1326 (Fed. Cir. 2016). What a prior art reference discloses is a question of fact that we review for substantial evidence. *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1378 (Fed. Cir. 2023). The substantial evidence standard asks “whether a reasonable fact finder could have arrived at the agency’s decision.” *OSI Pharms., LLC v. Apotex, Inc.*, 939 F.3d 1375, 1381 (Fed. Cir. 2019) (citation omitted).

B

Mr. Li argues that Apple’s expert, Dr. Bederson, did not adequately explain why Ryu’s disclosure of performing gaze detection after detecting movement satisfied the “only after” limitation. Mr. Li further argues that Ryu does not inherently disclose the “only after” limitation: while Ryu simply provides that motion detection is a sufficient condition for performing gaze detection, motion detection is a necessary condition in the claimed invention.

Mr. Li’s inherency argument assumes that because the Ryu reference does not expressly state that the device never performs gaze detection before first detecting motion, the Board’s unpatentability holding must have relied on inherency. But the Board never relied on an inherency theory. To the extent that Mr. Li contends that “only after” is akin to a negative limitation, prior art references “need not state a feature’s absence in order to disclose a negative limitation.” *AC Techs. S.A. v. Amazon.com, Inc.*, 912 F.3d

1358, 1367 (Fed. Cir. 2019) (citing *Süd-Chemie, Inc. v. Multisorb Techs., Inc.*, 554 F.3d 1001, 1004–05 (Fed. Cir. 2009) (affirming finding that reference disclosed “uncoated” film where it did not describe the film as coated and did not suggest necessity of coatings)).

We conclude that substantial evidence supports the Board’s conclusion that Ryu, when read as a whole, discloses the “only after” limitation. The Board reasonably relied on the Ryu reference itself, noting that Ryu disclosed a device in “another exemplary embodiment,” which may include a proximity sensor. *Final Decision*, 2024 WL 2750500, at *5 (citing Ryu col. 21 l. 37 – col. 22 l. 47). The Board reasoned that because Ryu expressly disclosed proximity sensors in the context of separate embodiments, Ryu’s primary embodiment describes “a device with the claimed capability and no additional sensors that would suggest alternative approaches” and “does not contain a proximity sensor—i.e., it is incapable of detecting proximity.” *Id.* In short, the Board reasonably found that Ryu’s primary embodiment discloses a device that has a motion sensor and no other sensors. Given that the primary embodiment’s device triggers gaze detection after motion is detected and features no other triggers, a fact finder could reasonably conclude that a skilled artisan would read Ryu’s preferred embodiment as performing gaze detection only after motion is detected. The Board adequately explained its rationale, and substantial evidence supports its finding that Ryu discloses a device that performs gaze detection only after motion is detected.

Finally, Mr. Li appears to argue that even if the “only after” limitation is disclosed in Ryu, such inherent disclosure would be accidental, unintended, or unappreciated and thus could not form the basis of a finding of anticipation. *See* Appellant’s Opening Br. at 17 (citing *Tilghman v. Proctor*, 102 U.S. 707, 711–12 (1880)). This argument lacks merit, however, because the Board’s unpatentability holding did not rely on the conclusion that the “only after”

limitation was inherent in Ryu’s disclosure. To the extent that Mr. Li contends that there is no motivation for the Ryu reference to achieve the “only after” limitation, the Board did not need to find in Ryu a motivation or explanation for why Ryu’s primary embodiment performs gaze detection only after detecting motion. *See Final Decision*, 2024 WL 2750500, at *5.

CONCLUSION

We have considered Mr. Li’s remaining arguments but do not find them persuasive. For the foregoing reasons, we *affirm*.

AFFIRMED

COSTS

No costs.

CERTIFICATE OF COMPLIANCE

I hereby certify that this petition complies with the type-volume limitation of Fed. R. App. P. 35(b)(2)(a) and 40(b)(1). This petition contains 2,315 words excluding the parts exempted by Fed. R. App. P. 32(f) and Fed. Cir. R. 32(b)(2). This petition 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). This petition has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman 14 point font.

Respectfully submitted,

Date: June 23, 2025

/s/ Chian Chiu Li

Chian Chiu Li

Appellant