

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,
v.
CHIAN CHIU LI,
Patent Owner.

IPR2023-00560
Patent 11,016,564 B2

Held: April 24, 2024

Before: THU A. DANG, GARTH D. BAER, and
JASON W. MELVIN, *Administrative Patent Judges*.

APPEARANCES:

ON BEHALF OF THE PETITIONER:

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The above-entitled matter came on for hearing on April 24, 2024,
commencing at 9:00 a.m., via video teleconference.

P R O C E E D I N G S

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JUDGE MELVIN: This is a hearing for IPR2023-00560, reviewing Patent No. 11,016,564. I am APJ Melvin. I'm joined today by APJs Dang and Baer. Could we have the parties make their appearances, please, starting with Petitioner?

MR. SEITZ: Good morning, Your Honors. This is Adam Seitz, on behalf of Petitioner Apple. With me in the room but off camera is another attorney from my firm, Mr. Cliff Brazen.

JUDGE MELVIN: Thank you. And for Patent Owner?

MR. LI: Good morning, Your Honors. This is Chian Chiu Li, Patent Owner.

JUDGE MELVIN: Thank you, Mr. Li.

MR. LI: Representing myself.

JUDGE MELVIN: Yes. So as you know from our hearing order, you each have 45 minutes this morning, including your rebuttal presentation. You may reserve up to half your time for rebuttal. Before we begin, does anybody have any questions about our procedures today?

MR. SEITZ: Not on behalf of Petitioner, Your Honor.

MR. LI: No questions, Your Honor.

JUDGE MELVIN: Thank you. We do have your demonstratives, so you may refer to slide numbers if you would like during the presentation. Alternatively, you may share your screen with us. We'll leave that choice up to you. Petitioner, Mr. Seitz, how much time would you like to reserve for rebuttal?

1 MR. SEITZ: Fifteen minutes, please, Your Honor.

2 JUDGE MELVIN: Okay. I will keep track of your time. I will
3 try to remind you when you get close to your rebuttal time or go into it. I
4 would ask that you sort of keep an eye on your own timer to the extent
5 possible. With that, we are ready when you are.

6 MR. SEITZ: Thank you, Your Honor, and may it please the
7 Board. I am not going to screen share today. I'll just refer to my
8 demonstratives since you have them in front of you. And I'm going to start
9 on DX-2, which is just the basic grounds that we've presented. Your
10 Honors, we've presented two grounds in this case, but both rely on the same
11 underlying base reference, Ryu. And so that's really where the focus of this
12 whole dispute has arisen, the disclosure of Ryu. So I'm not going to talk in
13 terms of the separate aspects of the grounds today. I'm going to focus on
14 some of the disputes that relate specifically to Ryu.

15 Now, the claims themselves -- moving to DX-3, I've repeated the
16 claims on the next few slides, in the event that we need to refer to them
17 easily. But the claims here are essentially the same, and there's no dispute
18 from the parties that there's any measurable difference or patentable
19 difference between any of the independent claims in this case that would
20 cause a difference in our analysis or our discussion here today for purposes
21 of talking through Ryu and Hodge, and how those impact the claims.

22 Each of the claims has the same basic elements. It starts with the
23 detection of an act. In each claim, it is a physical act, some sort of physical
24 motion, or physical movement, while a device such as a cellphone is in
25 standby mode. It performs, according to the claims, something to cause gaze

1 detection, looking at the user's eyes. "Only after" -- that same limitation --
2 that claim language, "only after," is used in each of the claims.

3 Only after detecting that physical movement, the device then
4 ascertains whether the user is looking towards the device, determines
5 whether the user is recognized -- so some sort of facial or user recognition is
6 performed -- and then the device, according to the claims, will present a
7 plurality of content items for the user to watch or to see. These same
8 aspects, they might use slightly different wording. They might have slightly
9 different ordering. But that is the fundamental aspect of each of the
10 independent claims in this case.

11 So focusing on Petitioner's demonstratives DX-6, I want to walk
12 through the basic aspect of our first ground, our combination here. We have
13 relied on a base reference called Ryu and combined it with Hodge. Ryu
14 itself discloses every limitation except for determining whether the user is
15 recognized. In that instance, we have relied on Hodge. So what does Ryu
16 teach us? Ryu teaches us that it is an electronic device. They talk about a
17 cellphone. The figures depict a cellphone that, while in standby mode, has
18 sensors, such as accelerometers or gyroscopes, that detect movement.

19 The user can then manipulate the device of Ryu by turning it or
20 moving it in a certain manner to cause the device to essentially wake up its
21 sensor, to determine a gaze detection. It keeps the screen black in a standby
22 mode. So when it's moved, it wakes up its sensor. The screen stays black.
23 The sensor of Ryu, such as a camera, will then perform gaze detection to see
24 if the user is looking at the screen of Ryu's device, and if it is, then the
25 device will wake up, and then perform an action.

1 So the processor in Column 19, starting at line 65, Ryu tells us the
2 processor will determine whether a user looks at the device according to the
3 described facial recognition or the eyes estimating procedure that it
4 describes, and if it's determined that the user is looking at the device, the
5 processor is going to perform a function. Ryu also tells us -- this comes
6 from Column 18, lines 61 to 64 -- that after gaze detection, but before it
7 performs its preset function -- so there's been a physical movement of the
8 device. The device has turned its camera on to perform gaze detection. But
9 before it performs its ultimate function, it is going to show what's called a
10 gateway screen.

11 These gateway screens are shown in Figure 18. Many different
12 variations of them. We have relied on the gateway screen that is shown in
13 Figure 18F. 18F will show us different aspects of the content that can be
14 shown to the user before the device basically goes to the function that it's
15 going to perform when it unlocks itself. These include a lock release
16 message, advertisements, calendars such as meetings you may have, and
17 social media feeds.

18 Now, as I mentioned, Ryu does not actually teach user recognition.
19 It talks about determining that the user is looking at the device, if we look at
20 the disclosures in Columns 19 and 20, and repeatedly talks about the user.
21 But I think it's a little unclear as to whether that is specifically saying that it
22 is a particular user, or just a user of the device in general. So that's where
23 our reliance on Hodge comes in, which is our secondary reference.

24 Hodge also discloses -- it's a patent application. It discloses a
25 cellphone, a cellphone that is in standby mode where the screen is off and

1 it's conserving power, and then based on the user moving that device, it will
2 perform gaze detection, and determine if the user is looking at the device,
3 and if so, the screen will turn on. Or if the device is on and the user is no
4 longer looking at the device, the screen will turn off.

5 Hodge tells us -- and I've quoted this on DX-6 -- Hodge tells us
6 that this gaze detection also can be used to distinguish between authorized
7 users and unauthorized users, based on the image sensor data that it's
8 collecting. So Hodge discloses very clearly a user detection, a user
9 identification. We combine that with the gaze detection that's included in
10 Ryu, and this covers the aspects of the claims that disclose performing gaze
11 detection after the movement is detected, and then determining whether the
12 user is recognized.

13 We presented evidence, moving to slide DX-7, from Dr. Ben
14 Bederson. Dr. Bederson has a long history in computer science and
15 human/machine interaction. He has talked through the aspects of why a
16 POSITA would have combined Ryu with the specific user identification
17 aspect of Hodge. That is detailed in his declaration starting at paragraph 50
18 and going through 67. But the long and short of it is that he says that a user,
19 a POSITA would have combined these two functionalities because of the
20 added security that this would provide to Ryu's device.

21 Ryu, according to Dr. Bederson, would allow any user, if their
22 gaze is detected, to see what's on the screen, and in this combination, the
23 motivation a POSITA would have had is that you would want to limit what
24 is on the screen to only an authorized user, to protect the privacy of what
25 may be shown, to protect the phone from being used by people that you

1 wouldn't want it to be used by.

2 He opines that this is a simple combination. It's a simple
3 combination because Ryu discloses already, in Column 19, at approximately
4 line 13, how the system of Ryu can determine aspects of the user's face. So
5 width of the eyes, width of the nose, the cheekbones and what those look
6 like -- fundamental features of user identification, facial identification, that a
7 camera sensor in Hodge would use, and that is already included in certain
8 aspects in Ryu. So he talks about how it would be a relatively simple
9 programming aspect.

10 So moving to slide DX-8, the dispute here does not center around
11 motivation to combine. The motivation to combine our arguments from Dr.
12 Bederson, those have been unopposed. There is no other competing expert
13 declaration or competing expert testimony that's in this case. Not even a
14 deposition was taken of Dr. Bederson. The focus of this case from Patent
15 Owner is the question of what this "only after" limitation means.

16 And here, it appears the Patent Owner is arguing that the
17 challenged claims must be incapable of performing gaze detection in any
18 scenario except touching or physically moving the device in a way that
19 would preclude the inclusion of other sensors, if I understand the briefing
20 from Patent Owner correctly. The support for this argument is an
21 embodiment in Ryu that includes a separate sensor, 1102, that is a proximity
22 sensor. This is detailed a bit more on slide DX-9.

23 Now, as an initial matter, Your Honors, Apple has not relied on the
24 Figure 11 embodiment. Our petition maps to the Figure 1 embodiment. The
25 Figure 1 embodiment of Ryu relies on sensor 101, and sensor 101 does not

1 include a proximity sensor. You can see our mapping on Slide DX-9. This
2 is the petition at 17. Here, we rely specifically on Ryu's teaching that the
3 device 100 includes a sensor 101, and then we include the specific
4 descriptions of what that sensor is described as in Ryu, which is described as
5 a gyro, an accelerometer, a magnetic field sensor for sensing rotation
6 direction, orientation sensor for detecting inclination direction, GPS sensor
7 for detecting location, gravity sensors, rotation number sensor. All of these
8 detect movement. So sensor 101, in the Figure 1 embodiment of Ryu,
9 detects movement.

10 In those description in Ryu at Column 6, there is no disclosure of a
11 proximity sensor, or any other type of sensor other than a movement sensor.
12 That is what we have mapped for the movement sensor in Ryu for applying
13 to the claims of the '564 Patent. Sensor 101 simply does not include any
14 proximity sensor. It is motion alone in Ryu.

15 The 1102 sensor of Figure 11 is a separate embodiment. We have
16 not relied on that. You will not find a mapping in our petition or in our
17 expert declaration that refers to the Figure 11 embodiment, or that relies on
18 sensor 1102 in the Figure 11 embodiment. We have solely relied on the
19 Figure 1 embodiment. Looking at Slide DX-10, we see a little bit more from
20 Ryu about what this Figure 11 embodiment is. And we --

21 JUDGE MELVIN: Mr. Seitz, can I just stop you there for a
22 second?

23 MR. SEITZ: Sure.

24 JUDGE MELVIN: Just to make sure I understand, that is your
25 primary argument, and your contention in the petition here is that Ryu has an

1 embodiment that has only the claimed type of sensor, and therefore, under
2 Patent Owner's construction, your contentions satisfy that construction and
3 meet the claim. Right?

4 MR. SEITZ: That is right, Your Honor.

5 JUDGE MELVIN: So the primary argument here from
6 Petitioner doesn't depend on the Claim construction?

7 MR. SEITZ: That's absolutely right, Your Honor.

8 JUDGE MELVIN: Okay.

9 MR. SEITZ: Our primary argument is that sensor 101 is the
10 sensor that detects the act, the physical movement that's described in the
11 limitations, and that is all there is. There's nothing else. The disclosure of
12 Ryu in that Figure 1 embodiment, what we have mapped, then performs
13 gaze detection after that. And it is the only sensor, the movement sensor
14 that's disclosed in that Figure 1 embodiment. So our argument doesn't rest
15 on any Claim construction. Ryu is performing gaze detection only after
16 detecting movement in that Figure 1 embodiment, which is what we have
17 mapped.

18 JUDGE MELVIN: Okay.

19 MR. SEITZ: Did that answer your question, Your Honor?

20 JUDGE MELVIN: Sure. Thank you.

21 MR. SEITZ: Now, I think it's important to draw out that there
22 is not a bleeding over or a combination in Ryu between these two
23 embodiments. The Figure 11 embodiment described in Ryu is a different
24 embodiment. Ryu describes itself as -- when it gets to Figure 11, it
25 specifically notes -- I'm looking at Slide DX-10 -- that Figure 11 is a block

1 diagram of the device 1100, according to another exemplary embodiment.
2 Sensor 1102 is part of that Figure 11 other exemplary embodiment.

3 And what you'll see, as we get into Ryu's Figure 11 embodiment,
4 is that there is a clear shift to something that is different for Ryu. The
5 numbering changes. It's no longer device 100. It's device 1100. It's no
6 longer sensor 101. It's sensor 1102. There are different numbers applied to
7 all of the different components or sensors or aspects of the device in this
8 Figure 11 embodiment, and it is a shift to another exemplary embodiment,
9 one that we have not relied on.

10 Now, looking at DX-11, talking a bit more about this sensor 1102,
11 Ryu does disclose that sensor 1102 may include a proximity sensor and a
12 motion sensor. We cite that from Ryu, Column 22 here on Slide DX-11,
13 where it notes that sensor 1102 may include a proximity sensor and a motion
14 sensor and describes what that proximity sensor could be. But this is the
15 only embodiment where Ryu discloses proximity detection. It is the only
16 embodiment where it describes the motion sensor being combined with or
17 having also a motion sensor and a proximity sensor.

18 There is no evidence that's been submitted to Your Honors as part
19 of Ryu saying that the Figure 11 embodiment, or that sensor 1102 also
20 describes the operation of sensor 101. There's been no expert testimony
21 from Patent Owner saying that these embodiments are interchangeable.
22 There's been no expert testimony at all from Patent Owner saying that
23 Figure 1 embodiment could also include the proximity sensor. In essence,
24 what we have here is Patent Owner mixing and matching two different
25 embodiments, and there simply is no support in either the spec, the

1 specification, or in the expert declarations in this case, to allow us to mix
2 and match, improperly mix and match embodiments in that manner.

3 So our reading, going back to that question, our reading does rely
4 on Figure 1, which only discloses a motion sensor, and only performs gaze
5 detection after that motion sensor is triggered. There is no evidence in Ryu
6 or elsewhere that that operation is changed or different because of a different
7 embodiment described in Figure 11, one that we are not relying on.

8 Moving to Slide DX-12, Your Honor. I think there's a separate
9 question, Your Honors -- I think there's a separate question that you could
10 get to that also would show that Patent Owner's arguments are insufficient
11 in this case, but I do believe your analysis could end where I just ended, with
12 the discussion of the Figure 1 versus Figure 11 embodiment. You don't
13 need to get into the separate question of how many different examples or
14 embodiments are disclosed in the '564 Patent.

15 If you find that we have relied on Figure 1, and that Figure 1
16 discloses a motion sensor without any proximity -- without any proximity
17 sensor, excuse me -- then your analysis can end there. That is sufficient to
18 meet the claims, each of the independent claims, based on the express
19 disclosure of Ryu, based on how we have mapped it.

20 If you would like to continue on, there certainly is support also to
21 reject Patent Owner's arguments that he's made in his reply, or in his sur
22 reply and Patent Owner response. And here, Your Honors, I would say there
23 is nothing in the '564 Patent, in the claims or the specification, that would
24 preclude the Patent, or preclude the device from also performing proximity
25 detection.

1 In other words, there's nothing in the claims that say you can't
2 have a multitude of different sensors. For example, a proximity sensor and a
3 motion sensor. The claims only say that you will take action, such as the
4 gaze detection, and then performing the plurality of content items, after it
5 detects motion, only after it detects motion. There's nothing in the claims
6 that would preclude the device from having a proximity sensor that detects
7 when someone comes into its proximity. The claims, however, would say
8 that you can't take the action of gaze detection and showing the plurality of
9 content items after the gaze detection.

10 So in that scenario, you can have a proximity sensor on the one
11 hand. You could have a motion detector or a motion sensor on the other
12 hand. And the proximity sensor could be doing what it does, detecting when
13 things come close, but no action is going to be taken in the '564 claims,
14 unless and until the motion detector is triggered. Then, and only after the
15 motion detector is triggered, will you perform gaze detection, recognize the
16 user, and then show the plurality of content items. I think Patent Owner --

17 JUDGE MELVIN: Sir, can I just ask about that? In that
18 scenario, the proximity sensor might be used for any range of functions, so
19 long as those functions don't include gaze detection?

20 MR. SEITZ: That's right, Your Honor.

21 JUDGE MELVIN: Okay. So as long as gaze detection
22 depends solely on the movement sensor, then you would say that falls within
23 the claims?

24 MR. SEITZ: You're absolutely right, Your Honor. And its
25 gaze detection -- and if I just follow through the claim, it's gaze detection,

1 it's identification of the user, and then it's the display of the plurality of
2 content of items. Those three kind of all flow in that process afterwards.
3 But it begins with gaze detection, and it can only happen after the motion
4 detection.

5 JUDGE MELVIN: Now, when you say those items flow, you
6 just mean that there's a natural sequence to the Claim language, right? It's
7 the gaze detection that's limited to being only after detecting the act?

8 MR. SEITZ: Correct, Your Honor.

9 JUDGE MELVIN: And it's just those other steps don't make
10 any sense unless they follow gaze detection.

11 MR. SEITZ: That's correct, Your Honor.

12 JUDGE MELVIN: Okay. Got it.

13 MR. SEITZ: And so, you could have a proximity sensor. You
14 could have a light sensor. You could have a sound sensor. You could have
15 multitudes of different types of sensors. But as long as, according to the
16 claim, the gaze detection is only occurring after sensing motion, the physical
17 motion described in the very first limitation of each of the independent
18 claims, that's what matters, according to this claim. And that's --

19 JUDGE MELVIN: I have just a hypothetical. What if a device
20 requires both motion detection and proximity in order to perform gaze
21 detection? Would that fall within the claim?

22 MR. SEITZ: Well, that's not Ryu. That's not the Figure 1
23 embodiment that we've relied on, Your Honor. I want to make that
24 abundantly clear. I think if you're doing gaze detection and the motion --
25 I'm sorry. If you're -- you said proximity and motion; is that right?

1 JUDGE MELVIN: Proximity and motion both required for
2 gaze detection.

3 MR. SEITZ: I think the ordering would matter in that instance.
4 You would do proximity, and then you would have motion. And as long as
5 it's the motion that leads to the gaze detection, I don't think that that would
6 be a problem, Your Honor. I do believe that that physical motion, that
7 detection of physical movement, physical motion, is what must drive the
8 gaze detection, even if there is a proximity sensor that perhaps gives power
9 to the motion sensors, or powers up certain aspects of the device beforehand
10 so it's ready. What's important here is that the motion sensor is the one that
11 is triggering the, causing the gaze detection.

12 JUDGE MELVIN: Okay. Thank you.

13 MR. SEITZ: So the parties have debated, and I think what you
14 and I were just talking about, Your Honor, is shown in the different
15 examples that are in the specification. I'm looking at DX-13. There's a
16 number of different examples that are provided in the patent specifications.
17 I don't think, to reach a conclusion that this patent is invalid, you need to
18 determine how many different embodiments are disclosed in the '564. The
19 parties have gone back and forth on that.

20 There are different embodiments here. There's gaze detection
21 only. There's gaze detection plus proximity. There's gaze detection plus
22 physical movement. There's even an embodiment that's described later in
23 the patent that is speech recognition plus gaze detection. The important
24 point, what the thrust of our argument is, which is what you and I have been
25 discussing, Your Honor, is that it is the physical motion that is causing the

1 gaze detection. And the patent even notes that these multiple scenarios,
2 looking at Slide DX-14, could be selected by the user. It leaves open the
3 possibility of allowing the user -- in that device. Not in the claims, but in
4 that device, allowing the user to pick how they want to operate and interact
5 with the device.

6 And looking again at Slide DX-14, Your Honors, we see Figure 1,
7 which I have repeated on the left side of the page here. Figure 1 is the one
8 figure that we have of the embodiment of the '564 Patent. We see sensor 10,
9 the camera sensor. We see sensor 20. That's the proximity sensor. And we
10 see sensor 24, which would be the motion sensor, the accelerometer type
11 sensor. All three of those are present there. I think this fits the scenario that
12 we've been discussing perfectly. You could have proximity sensors that
13 wake up or warm up the rest of the device to be ready to take action, but it
14 is -- according to the claims, now, it is the physical -- the detection of the
15 physical movement that causes the gaze detection.

16 And in Slide DX-15, Your Honor, we've already discussed this. I
17 won't belabor. Here, nothing in the challenged claims excludes the
18 capability to also perform proximity detections, or light sensor detections, or
19 anything else. The "only after" limitation places a temporal requirement on
20 the claims for when gaze detection must take place, and that is specifically
21 tied in the claims to detecting the physical movement of the device.

22 And that, Your Honor, we've cited the *Boesen v. Garmin*
23 *International* case. Because these are comprising, because these are open-
24 ended claims, it is, as the Federal Circuit said, there is no consequence that it
25 can also perform other input methods, as long as, as we have shown in Ryu,

1 it is the physical motion that triggers the gaze detection, which is the Figure
2 1 embodiment of Ryu.

3 JUDGE MELVIN: So I guess I'm curious about the open
4 transition, right? Let's say a device could perform gaze detection with
5 proximity only but would also perform gaze detection with motion only.
6 Right? It seems like that would, in a sense, satisfy the "only after" language,
7 because it would perform gaze detection after detecting motion.

8 Well, maybe I should rephrase. It seems like it might satisfy an
9 after limitation, but the "only after," I think one could read to say that if gaze
10 detection is performed following proximity detection alone, that would
11 remove a device from the Claim scope, even though it also has this
12 capability to perform gaze detection after motion detection. That might have
13 been a long-winded question, but, you know, do you agree that the "only
14 after" sort of operates in that fashion?

15 MR. SEITZ: Yes. I would agree with your example. I
16 understood it, and it makes sense, Your Honor. And I think that is the
17 import of what this "only after" means. I would begin with a note that that is
18 in the hypothetical aspect of what would be included here, because Ryu's
19 embodiment one is only the motion sensor. And so, we're not speaking --
20 I'm happy to talk in the hypotheticals, but I do want to center this and make
21 sure that our understanding is clear. Ryu does not have that scenario in
22 Figure 1. We're not looking at hypothetically in Ryu 1 of a proximity to
23 sensor or a light sensor detecting something. Ryu Figure 1, embodiment
24 one, is only the motion detector.

25 But I would agree with you generally that if there is actions that

1 are taking place after multiple sensors, that potentially raises a problem in
2 the claims, because it does have the “only after” language, and that “only
3 after” is what is the only thing that is disclosed in Ryu’s embodiment one.
4 Physical movement is detected, gaze detection begins, and that is the only
5 thing that we have in that first embodiment.

6 JUDGE MELVIN: Thank you.

7 MR. SEITZ: I have nothing further, Your Honors. If there’s no
8 other questions, then I will rest until my rebuttal time.

9 JUDGE MELVIN: Okay. You have about 19 and a half
10 minutes left.

11 MR. SEITZ: Thank you, Your Honor.

12 JUDGE MELVIN: Okay. Mr. Li, you have 45 minutes. How
13 much time would you like to reserve for rebuttal?

14 MR. LI: I’d like to reserve 15 minutes, Your Honor.

15 JUDGE MELVIN: Okay. Got it. And same thing. I will try to
16 sort of point out when your time is moving into rebuttal or getting close to
17 that, but, you know, I ask that you sort of keep one eye on the clock.

18 MR. LI: Thank you, Your Honor. Okay. Your Honor, thank
19 you again. My name is Chian Chiu Li, Patent Owner, on behalf of myself.
20 I’ll refer to a slide number. So I would like to turn to Slide 2. Here we have
21 two grounds that are pending. They are obviously strong, and they’re 103.
22 Among the tentative claims, Claim 1, 8, and 14, in the tentative claims, there
23 are three cited references with Hodge and Stallings. In today’s Patent
24 Owner’s argument, we’ll focus on Claim 1 and the Ryu reference.

25 Moving to Slide 3, we have prior art of Claim 1 here,

1 (INDISCERNIBLE) 1 and 2. Please pay attention to the underlying parts
2 (INDISCERNIBLE), and “only after” limitation are recited. Moving on to
3 Slide 4, we will analyze Claim 1. The “only after” limitation is performing
4 gaze detection only after detection, the act. The act is about a user move a
5 device, such as fix the device. The act is used as a trigger for gaze detection.
6 There could be other triggers. For example, a trigger using proximity
7 events. That is about a user approaches a device.

8 Moving to Slide 5, here we have two triggers. One trigger uses the
9 act. The other trigger uses proximity event. But these two triggers are not
10 equal. They are different. Let’s compare them. The act may more
11 accurately indicate a user’s intention to read content displayed on the device,
12 but the proximity event does not accurately indicate a user’s intention to
13 read content on the device. For example, when a user picks up a
14 smartphone, it’s highly possible the user wants to read information presented
15 on the phone. On the other hand, when a user approaches a smartphone --
16 example, the phone is on the table. The approaching event may not mean
17 the user wants the phone to display information, especially personal
18 information.

19 Let’s move to Slide 6. So the trigger using proximity events has
20 some job act, such as privacy concern and the power consumption. In
21 comparison, the “only after” limitation uses the act as a trigger, and has
22 merits such as better privacy protection, and lower power consumption. But
23 that’s -- the Ryu reference discloses the “only after” limitation.

24 Let’s turn to Slide 7. Here is an excerpt from Ryu’s specification.
25 Some key tasks of this method are underlined. Moving on to Slide 8, Ryu

1 decides when it is determining that the device 100 has rotated by 180
2 degrees in a clockwise direction by using a sensing value. The processor
3 103 activates the function of a front camera, A21. As such, Ryu discloses
4 gaze detection is performed after detecting a rotation act. However, Ryu
5 does not disclose gaze detection is performed only after detecting the act.
6 That is, Ryu does not disclose the “only after” limitation. However --

7 JUDGE MELVIN: I’m not sure I understand that position.
8 What does Ryu disclose as an alternative for triggering gaze detection?

9 MR. LI: It’s silent about that.

10 JUDGE MELVIN: Okay.

11 MR. LI: And I will touch on this later from another angle. So
12 we see that Ryu does not expressly disclose the “only after” limitation.
13 However, the petition asserts Ryu discloses the “only after” limitation. So
14 let’s turn to Slide 9 to see how Petitioner determines its assertion. Slide 9
15 shows an excerpt of the petition. It contains two parts -- a self-made
16 statement, and the assertion. The self-made statement and assertion are
17 analyzed on Slide 10.

18 Let’s move to Slide 10. The statement recites Ryu teaches in
19 response to sensing rotation of the device 100. The processor 103 activates
20 a function of the front camera to obtain an image of the user. That is
21 performed gaze detection after detecting the act, and then determines
22 whether the user is looking at the device 100. Then the assertion recites a
23 person having ordinary skill in the art would have understood that Ryu
24 teaches that gaze detection is performed only after detecting the act as
25 claimed. When you look at this, you see the issue that Petitioner’s own

1 statement supports the assertion. The answer is no. Regardless of whether
2 the statement is proper or not, it has nothing to support the word “only.”

3 Moving back to Slide 9, in the paragraph, the petitioner indicates it
4 has some support from Dr. Bederson’s declaration. So let’s go to Slide 11,
5 to take a closer look at the declaration. In paragraph 59, the declaration
6 recites furthermore, because Ryu expressly teaches that it is in response to
7 the device 100 sensing a user’s location, that is detecting the act -- that’s the
8 process of 103 -- then activates a function of the front camera to obtain an
9 image of the user. That is performing gaze detection only after detecting the
10 act.

11 So look at here. Performing gaze detection only after detecting the
12 act. But from Dr. Bederson’s own narratives, there is no evidence and no
13 support for the word “only.” The declaration just provides a conclusory
14 assertion, without any evidence. So even its own statements gives no
15 support for the “only after” limitation.

16 Let’s move to Slide 12. So, as the petitioner cannot show that Ryu
17 discloses the “only after” limitation expressly, does it contend the “only
18 after” limitation inherently exists? Well, in such a case, the petition has to
19 prove that. It’s the petitioner’s burden to do it. However, it can’t find
20 anything in the petition about it.

21 JUDGE MELVIN: Well, Mr. Li, why isn’t it enough for
22 Petitioner to assert that Ryu has an embodiment where gaze detection is
23 performed after detecting motion, and that embodiment contains no other
24 sensors other than the motion sensor? It seems like Petitioner has addressed
25 the “only after” limitation, by relying on a sort of limited range of options

1 within Ryu in that embodiment.

2 MR. LI: Yes, Your Honor. Again, like I said, I will touch on
3 this topic later, and I will explain more on this. In the case that Ryu
4 mentioned, movement sensor solely. So move to Slide 13. Well, maybe it's
5 better for me to explain now instead of later, even though later I will touch
6 on this again. The problem with Ryu's embodiment, with Ryu's case, is that
7 Ryu's method is not a practical method, because he does not exclude other
8 figures, which we have some -- which has some drawbacks. So it is not like
9 two things, you can randomly pick up one. These two choices are different.
10 So it's practical, it has merits to choose one of them, instead of randomly
11 you pick up one.

12 Okay. I will explain this more later. So now let's move to Slide
13 13. As explained in Patent Owner's response, Ryu not only fails to disclose
14 the "only after" limitation, but also fails to anticipate the "only after"
15 limitation. For example, Ryu has no need and no intention to use the "only
16 after" limitation. Further, the "only after" limitation is not useful for Ryu's
17 method. Ryu's method, explained by Ryu, uses a location act for a trigger
18 for gaze detection. Ryu does not disclose other triggers. Thus, there's no
19 need and no intention for Ryu to use the "only after" limitation to exclude
20 nonexistent other triggers.

21 For example, if a user has two methods, Method A and Method B,
22 the user will say, I only used Method A. But if the user has one method,
23 Method A, the user will say, I used Method A, but would not say, I only
24 used Method A, because the word only here is unnecessary and useless.
25 Further --

1 JUDGE MELVIN: Well, Mr. Li, doesn't that support
2 Petitioner's view of Ryu? Because if your point is that Ryu only has one
3 method, when it has -- in the embodiment where Ryu has only a motion
4 detector, then the only method for triggering gaze detection is that motion
5 detector, and Ryu has no reason to focus on "only" as a limitation. Right?
6 Or a description of its approach. Right? I'm not sure that's any different
7 from an inherency theory, right? Like, if Ryu has one method of triggering
8 gaze detection, then it necessarily performs gaze detection only after that
9 method. Does it not?

10 MR. LI: Yes, Your Honor. So now we actually see Ryu and
11 Patent '564 (INDISCERNIBLE) different purposes, so this is very
12 important. Different purposes. For Ryu, Ryu just uses the location act as a
13 trigger, but the '564 Patent uses the act as the only trigger. So the purpose
14 for only trigger is to exclude other triggers, such as proximity trigger,
15 because Ryu does not exclude other triggers, including proximity trigger.
16 Ryu's method leaves a door open for the other triggers, and that will cause
17 problem in some cases.

18 So again, these two triggers are not equal. It has merits to pick up
19 only one. If there are -- it's not like you have two choices, they are equal.
20 You randomly pick up one, and you say, I only use that. That has less merit.
21 But in this case you have multiple triggers, and it has merits to exclude some
22 triggers. That's why it is useful and meaningful, and has practical use to
23 only use the act, the motion as a trigger.

24 JUDGE MELVIN: It seems a little bit, Mr. Li, like you are
25 arguing that your claims require a device capable of multiple different

1 triggers but limited to using the motion trigger.

2 MR. LI: Yes. Yes.

3 JUDGE MELVIN: That is -- you are arguing that a device
4 consistent with Claim 1 requires non-motion capabilities?

5 MR. LI: Yes, Your Honor. So a device may have multiple
6 triggers, so the purpose of Claim 1 is to use the act as the only trigger, and to
7 exclude other triggers. Those triggers might have some job acts, and it's
8 better to avoid using those triggers. And so, this has use in practical life, so
9 you clearly exclude some other triggers, which may bring weakness to a
10 device.

11 JUDGE BAER: Mr. Li?

12 MR. LI: Yes?

13 JUDGE BAER: Just to clarify -- this is Judge Baer. Just to
14 clarify, you just said it may have other triggers. Is it your position that it
15 may have other triggers, or that it must have other triggers that are disabled?

16 MR. LI: Your Honor, Claim 1 does not mention other triggers,
17 but the purpose of Claim 1 is to exclude other potential triggers, including
18 proximity trigger. But that (CROSSTALK) --

19 JUDGE BAER: So I don't know that -- I don't know that that
20 answers my question, though. I understand that. So is it your position that
21 it -- for a reference to be anticipatory, or to in fact be infringing, it would
22 need to -- it must have other triggers that are disabled? Or is it your position
23 simply that it may have other triggers, but it doesn't have to have other
24 triggers that are disabled?

25 MR. LI: Yes. So it may have other triggers, so there's

1 nothing -- it has nothing to do with must, like must have some capability, or
2 must have this, must have that. It's a normally written claim, so it has no
3 meaning to include -- to must include some other potential things. And so,
4 again, the purpose is to exclude some potential triggers which you do not
5 want to have otherwise.

6 JUDGE DANG: Mr. Li, can I ask a question?

7 MR. LI: Yes.

8 JUDGE DANG: So Patent Owner is relying on the
9 embodiment of Figure 1. Okay. So Figure 1, when you compare it to your
10 claim, what is the difference? Because Figure 1 --

11 MR. LI: If --

12 JUDGE DANG: -- could have other sensors, but -- I mean, yes.
13 The embodiment there has the rotation sensor.

14 MR. LI: Yes. I will say that Claim 1 is set up using Figure 1 as
15 a background. So a device as illustrated in Figure 1 may have multiple
16 sensors, and they may use those multiple sensors as a trigger for gaze
17 detection. (INDISCERNIBLE) choose one of them, the motion sensor as the
18 only trigger for gaze detection.

19 JUDGE DANG: Yes. So would that be the only act then, in
20 that first embodiment? The only act that would trigger the camera?

21 MR. LI: Yes, Your Honor. So --

22 JUDGE DANG: Yes.

23 MR. LI: -- there are multiple triggers and Claim 1 uses the
24 motion sensor as the only trigger for performing gaze detection. Okay. So
25 let's move to Slide 14. While this is the last slide, I explained in Patent

1 Owner's response the cited references, including (INDISCERNIBLE), the
2 Ryu, Hodge, and Stallings, to now disclose the "only after" limitation, either
3 alone or in combination.

4 Further, the petitioner has a chance to challenge and rebut the
5 showing that Ryu fails to anticipate the "only after" limitation. But the
6 petitioner does not even attempt to do it, rebut the (INDISCERNIBLE). Ryu
7 fails to anticipate the "only after" limitation. In summary, the petitioner
8 does not show that the cited references disclose the "only after" limitation.
9 The two obviousness grounds fail. Your Honors, do you have more
10 questions?

11 JUDGE MELVIN: I don't believe we have any more
12 questions. You may reserve the rest of your time for rebuttal. You have
13 about 19 -- well, just like Petitioner, about 19 and a half minutes left.

14 MR. LI: Thank you for your time, Your Honors.

15 JUDGE MELVIN: Okay. Mr. Seitz?

16 MR. SEITZ: Thank you.

17 JUDGE MELVIN: Whenever you're ready.

18 MR. SEITZ: There's just one point that I want to address here
19 that I think is really the thrust of the issue, and that's just the breadth of
20 Claim 1, Claim 8, and Claim 14. There is no requirement that there must be
21 other triggers. There is nothing in the claims themselves that require that
22 there be other sensors or other triggers that must be disregarded.

23 So respectfully to Patent Owner, while that may be something that
24 he desires that was in there, Claim 1, Claim 8, and Claim 14 do not have
25 such a requirement or a limitation that's included in them. It talks merely of

1 having the detection of an act involving physical movement, performing
2 gaze detection only after that act of physical movement. So I think there
3 could be -- as we talked about earlier, Your Honor, there certainly could be
4 other sensors, but the way the Claim is written does not have a must aspect
5 to that.

6 That's the only thing I have. I would say if Your Honors have
7 questions for me, I'm happy to answer them. Otherwise, Your Honors, I
8 would rest.

9 JUDGE MELVIN: Okay. Nothing further from us. Thank
10 you, Mr. Seitz.

11 MR. SEITZ: Thank you, Your Honors.

12 JUDGE MELVIN: And Mr. Li, if you have anything further --

13 MR. LI: Yes.

14 JUDGE MELVIN: -- your 19 minutes are yours.

15 MR. LI: Thank you, Your Honor. I do have some points I
16 would like to make. Let's turn to Slide 6 of Petitioner's demonstratives. It
17 contains Ryu teaches every limitation of the independent claims, except for
18 determining whether the user is recognized. Well, this assertion is clearly
19 wrong, because as explained moments ago, Ryu does not disclose the "only
20 after" limitation.

21 Let's turn to Petitioner's Slide 8. Here, there are two
22 misstatements. The first misstatement contends Patent Owner argues that
23 the challenged Claim must be incapable of performing gaze detection in any
24 scenario except touching or physically moving the device. Patent Owner
25 never says so. Further, this capability issue is a new argument that is not

1 raised in the petition, so it is untimely, improper. Besides, it is irrelevant to
2 the patentability of the challenged claims.

3 The second misstatement on Petitioner's Slide 8 asserts Patent
4 Owner's support is from sensor 1102 solely. This is also wrong, because
5 Patent Owner's response relies more on sensor 101 of device 100, rather
6 than sensor 1102 of device 1100. Turning to Petitioner's Slide 12, here we
7 have three arguments. I believe the first two are straw man arguments.
8 They are also new arguments, that are untimely and improper and irrelevant.

9 The third argument -- that's in the third paragraph -- is a
10 misstatement. The term no dispute is actually in dispute. Besides, Petitioner
11 cannot provide any evidence that Ryu teaches the "only after" limitation. So
12 turning to Petitioner's Slide 13, Petitioner lists four scenarios, but the
13 scenario related to the "only after" limitation is not included. Thus, the list
14 on Slide 13 is an incomplete list.

15 Turning to Petitioner's Slide 15, the title and the three arguments
16 are new arguments that are not in the petition, so they are untimely,
17 improper. Besides, they are irrelevant. Turning to Petitioner's Slide 16, the
18 title is another misstatement. The term no dispute is wrong. Further, Ryu
19 and Hodge do not disclose the "only after" limitation, either alone or in
20 combination. So I'm ready to take additional questions from you, Your
21 Honors.

22 JUDGE MELVIN: I don't believe we have any further
23 questions for you, Mr. Li.

24 MR. LI: All right. So I think those are the main points I want
25 to address. Thank you for your time again, Your Honors.

1 JUDGE MELVIN: All right. Thank you. Well, with that, the
2 hearing is concluded. I want to thank everyone for their time this morning.
3 We appreciate you presenting your cases to us. And with that, the case is
4 submitted.
5 (Whereupon, the above-entitled matter went off the record at
6 10:01 a.m.)

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