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LENOVO - JVL C/O LESLIE A. VAN LEEUWEN 6123 PEBBLE GARDEN CT. AUSTIN, TX 78739			RITCHIE, DARLENE M	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN C. MESE, ARNOLD S. WEKSLER,
NATHAN J. PETERSON, and RUSSELL S. VANBLON

Appeal 2019-000451
Application 15/060,100
Technology Center 2600

Before JAMES R. HUGHES, LARRY J. HUME, and
JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

HUGHES, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Claims 1, 2, 4–9, 11–16, and 18–20 are pending, stand rejected, are appealed by Appellant,¹ and are the subject of our decision under 35 U.S.C. § 134(a). *See* Final Act. 1–2; Appeal Br. 1.² We have jurisdiction under 35 U.S.C. § 6(b).

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Lenovo (Singapore) Pte. Ltd. *See* Appeal Br. 2.

² We refer to Appellant’s Specification (“Spec.”), filed Mar. 3, 2016; Appeal Brief (“Appeal Br.”), filed July 23, 2018; and Reply Brief (“Reply Br.”), filed Oct. 23, 2018. We also refer to the Examiner’s Final Office Action

We AFFIRM.

CLAIMED SUBJECT MATTER

The invention relates to computer program products, information handling systems, and methods for “detect[ing] an input instrument hovering a distance away from an object displayed on an input surface and performing an action in response to the detection.” Spec. ¶ 5; *see* Spec. ¶¶ 26, 28, 34, 35, 37–40; Abstract. Claims 1, 8, and 15 are independent. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method comprising:
 - detecting an input instrument hovering a distance away from an object displayed on an input surface;
 - selecting a first action from a plurality of actions in response to the distance being within a first distance range away from the input surface;
 - selecting a second action from the plurality of actions in response to the distance being within a second distance range away from the input surface, wherein the action performed is the selected first or second action; and
 - performing the selected action in response to the detecting.

Appeal Br. 10 (Claims App.).

REFERENCES

The prior art relied upon by the Examiner as evidence is:

Name	Reference	Date
Joo et al. (“Joo”)	US 2016/0154519 A1	June 2, 2016 (filed Dec. 1, 2015)

(“Final Act.”), mailed Feb. 23, 2018; and Answer (“Ans.”) mailed Aug. 28, 2018.

Yun	US 2017/0195473 A1	July 6, 2017 (filed Jan. 12, 2017) ³
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REJECTIONS⁴

1. The Examiner provisionally rejects claims 1, 8, and 15 on the ground of non-statutory obviousness-type double patenting (OTDP) as being unpatentable over co-pending US Application No. 14/294,792 ('792 App.) in view of Yun. *See* Final Act. 2.⁵

2. The Examiner rejects claims 15, 16, and 18–20 under 35 U.S.C. § 101 as reciting non-statutory subject matter. *See* Final Act. 2–3.

3. The Examiner rejects claims 1, 2, 4, 8, 9, 11, 15, 16, and 18 under 35 U.S.C. § 102(a)(2) as being anticipated by Yun. *See* Final Act. 5–7.

³ Yun claims benefit of US 13/029,070, filed on Feb. 16, 2011.

⁴ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. § 102. The present application has an effective filing date after the AIA’s effective date for applications (March 16, 2013). Therefore, this decision refers to the AIA versions of 35 U.S.C. § 102, i.e., § 102(a)(2).

⁵ *See also* Non-Final Office Action (“Non-Final Act.”) dated Oct. 19, 2017 at 3–5. The at-issue claims have been amended by Appellant subsequent to the Non-Final Office Action. *See* Response to Office Action (“Response”), filed Jan. 19, 2018 at 2, 3, 5, 7. Appellant (Applicant) states that it “will file a terminal disclaimer when this issue is ripe . . . when either the instant application or [the '792 App.] has received a Notice of Allowance.” Response 7. Appellant does not address the provisional non-statutory obviousness-type double patenting (“OTDP”) rejection in the Appeal Brief or the Reply Brief. As of Feb. 25, 2020, the co-pending '792 application has not issued as a patent. Due to the provisional nature of the OTDP rejection and the probable changes in both the at-issue claims and the claims of the '792 App., we decline to reach the provisional OTDP rejection. *See Ex parte Moncla*, 95 USPQ2d 1884, 1885 (BPAI 2010) (precedential).

4. The Examiner rejects claims 1, 5–8, 12–15, 19, and 20 under 35 U.S.C. § 102(a)(2) as being anticipated by Joo. *See* Final Act. 7–11.

OPINION

Non-Statutory Subject Matter Rejection

The Examiner rejects claims 15, 16, and 18–20 under 35 U.S.C. § 101 as reciting non-statutory subject matter. *See* Final Act. 2–3; Non-Final Act. 6. The Examiner finds that claim 15 recites a “computer program product” comprising a “computer readable storage medium” (claim 15 (Appeal Br. 12)), and Appellant’s Specification describes both transitory and non-transitory embodiments of computer-readable media. *See* Final Act. 3; Ans. 3–4; Non-Final Act. 6. The Examiner interprets the recited computer-readable storage medium to include transitory signals, which is non-statutory subject matter. *See* Final Act. 3; Ans. 4; Non-Final Act. 6.

Appellant contends the Examiner erred in finding claims 15, 16, and 18–20 recite non-statutory subject matter. *See* Appeal Br. 5; Reply Br. 3. Specifically, Appellant contends that “[c]laims 15–20 are limited to a computer readable storage medium,” and the Specification distinguishes a “computer readable storage medium” from a “computer readable signal medium” that may include “propagated signals” or “transitory media that [are] not permitted under § 101.” Appeal. Br. 5.

We concur with Appellant that Appellant’s Specification expressly defines “computer readable storage media” to exclude (“specifically *NOT* include”) propagated signals, transitory media, or other non-statutory subject matter. Appeal Br 5. Appellant’s Specification, as pointed out by Appellant (Appeal Br. 5), distinguishes “computer readable signal medium” and

“computer readable storage medium” (Spec. ¶ 12) such that the “computer readable storage medium may be any *tangible* medium” (Spec. ¶ 12 (emphasis added)), and “computer readable signal medium” comprises “any computer readable medium that is not a computer readable storage medium” including “propagated data signal[s]” (Spec. ¶ 13). See Spec. ¶¶ 11–13.

The at-issue claims are distinguishable from those in *Ex parte Mewherter*, 107 USPQ2d 1857, 1859–62 (PTAB 2013) (“Precedential”), which found a “machine readable storage medium” to include non-statutory subject matter. *Mewherter*, 107 USPQ2d at 1862. Here, Appellant’s Specification provides concrete examples and definitions for a “computer readable storage medium” and a “computer readable signal medium,” and the definition of “computer readable storage medium” explicitly differentiates it from a “computer readable signal medium” including non-statutory subject matter. Spec. ¶¶ 12–13. Appellant’s Specification explicitly limits “computer readable storage medium” by disclaiming non-transitory embodiments. Accordingly, we construe “computer readable storage medium” to include only tangible subject matter and exclude non-statutory subject matter. Thus, unlike the case in *Mewherter*, Appellant’s Specification provides a “limitation on the form of the ‘machine-readable storage medium’” (*Mewherter*, 107 USPQ2d at 1859) and further limits “the ordinary and customary meaning of ‘computer readable storage medium’ to a person of ordinary skill in the art” such that, in the instant claims, “computer readable storage medium” does not “encompass . . . transitory media” (*Mewherter*, 107 USPQ2d at 1860).

Consequently, we are constrained by the record before us to find that the Examiner erred in determining that Appellant’s recited “computer

readable storage medium” includes non-statutory subject matter. Thus, we do not sustain the Examiner’s rejection under § 101 of independent claim 15 and dependent claims 16 and 18–20, which depend from claim 15.

Anticipation Rejection of Claims 1, 2, 4, 8, 9, 11, 15, 16, and 18 (Yun)

The Examiner rejects claims 1, 2, 4, 8, 9, 11, 15, 16, and 18 as being anticipated by Yun. *See* Final Act. 5–7; Ans. 4–5. Appellant argues independent claim 1, independent claims 8 and 15, and dependent claims 2, 4, 9, 11, 16, and 18, together as a group with respect to the 35 U.S.C. § 102(a)(2) rejection. *See* Appeal Br. 6–7. We select independent claim 1 as representative of Appellant’s arguments with respect to claims 1, 2, 4, 8, 9, 11, 15, 16, and 18. 37 C.F.R. § 41.37(c)(1)(iv).

Appellant contends Yun does not anticipate claim 1. *See* Appeal Br. 6–7; Reply Br. 2. Specifically, Appellant contends “Yun does not [disclose] multiple different actions being performed” and instead Yun describes “displaying a preview when the pointer is between distances D1 and D3.” Appeal Br. 6; *see* Appeal Br. 7; Reply Br. 2. Appellant further contends Yun describes that “when the distance is less than D1, the pointer is touching the surface (D0), and is therefore, no longer ‘hovering’ over the surface,” and “the preview is NOT displayed when the distance is greater than D3, so NO action is performed when the pointer is further than D3 away from the surface.” Appeal Br. 6–7. Therefore, according to Appellant, “Yun only teaches ONE action that is performed when the pointer is hovering a distance from the surface, and that one action is a display of preview information.” Appeal Br. 7.

In the rejection, the Examiner explains that Yun discloses detecting a pointer distance from a touch screen—“Yun discloses” “detecting an input

instrument hovering a distance away from an object displayed on an input surface,” for example, “an input instrument such as a finger is in proximity or hovering a distance D0–D3 above an input surface.” Final Act. 5 (citing Yun ¶ 81; Figs. 4, 5); *see* Ans. 5. The Examiner also explains that Yun discloses a first action (displaying preview information) when a pointer distance from the touch screen is between D1–D3: Yun discloses “a first action of displaying preview information for a photographed image is selected when the distance is between D1 and D3.” Final Act. 5 (citing Yun ¶¶ 118, 121; Fig. 22A). The Examiner further explains that Yun discloses a second action (inactivating display of preview information) when a pointer distance from the touch screen is less than D1 (between the touch screen (D0) and D1): Yun discloses “a second action of inactivating the display is selected when the hovering distance is between D1 and D0.” Final Act. 5–6 (citing Yun ¶¶ 118, 121; Fig. 22A).

We agree with the Examiner that Yun discloses the disputed features of claim 1. As pointed out by the Examiner (*see* Final Act. 5–7; Ans. 4–5) Yun discloses detecting various pointer distances from a touch screen surface (D0) (Yun ¶ 81; Fig. 4), and performing at least two distinct actions based on the detected distances—activating the display of preview information (preview of a message or photo) when a pointer is between distances D1 to D3, and deactivating the preview information when the pointer is less than D1 (between D0 to D1) (Yun ¶¶ 118, 121; Figs. 21B, 22A). *See* Yun ¶¶ 116–122; Figs. 21A–21C, 22A–22B.

Yun discloses (*supra*) the disputed features of claim 1, including: (1) “detecting an input instrument hovering a distance away from . . . an input surface;” (2) “performing the . . . [first] action in response to . . . detecting”

“the distance being within a first distance range away from the input surface” and “performing the . . . [second] action in response to . . . detecting” “the distance being within a second distance range away from the input surface.”

We disagree with Appellant’s interpretation of Yun—that Yun does not describe hovering at a distance between the surface of a touch screen (D0) and some distance away from the surface (D1)—“Yun explains that when the distance is less than D1, the pointer is touching the surface (D0), and is therefore, no longer ‘hovering’ over the surface.” Appeal Br. 6. Appellant’s interpretation conflicts with the express disclosure of Yun. *See, e.g.,* Yun ¶ 118; Fig. 4.

Accordingly, Appellant’s contentions do not persuade us of error in the Examiner’s anticipation rejection of representative independent claim 1. Therefore, we affirm the Examiner’s rejection of representative claim 1, independent claims 8 and 15, and dependent claims 2, 4, 9, 11, 16, and 18, not separately argued with particularity (*supra*).

Anticipation Rejection of Claims 1, 5–8, 12–15, 19, and 20 (Joo)

The Examiner rejects claims 1, 5–8, 12–15, 19, and 20 as being anticipated by Joo. *See* Final Act. 7–11; Ans. 5–8.

Appellant, however, does not substantively address the rejection of claims 1, 5, 8, 12, 15, and 19 as being anticipated by Joo. *See* Reply Br. 2; Appeal Br. 6–7; Ans. 6. Appellant does provide a generalized statement that these claims are not anticipated—“The Final Office Action cites an additional 102 reference, Joo, as teaching Appellant’s independent claims. However, Joo also does not teach performing different actions based on how far a user’s finger is hovering from a touch enabled screen.” Appeal Br. 7.

Appellant's generalized statement does not provide any persuasive evidence (i.e., citations to Joo) in support of the statement. Accordingly, we summarily affirm the rejection of claims 1, 5, 8, 12, 15, and 19 with respect to Joo. We note that claims 5, 12, and 19 are only rejected as being anticipated by Joo, Appellant does not address the rejection of these claims with specificity (*see* Ans. 6), and argument with respect to claims 5, 12, and 19 has, therefore, been waived.

With respect to claims 6, 7, 13, 14, and 20, Appellant contends Joo does not disclose the disputed limitations of claims 6, 7, 13, 14, and 20. *See* Appeal Br. 7–8; Reply Br. 3. Specifically, Appellant contends, *inter alia*, that Joo does not disclose “detecting a change in distance from a touch screen and performing an action based on the change in distance.” Appeal Br. 8; *see* Appeal Br. 7; Reply Br. 3.

Claim 6 does not expressly recite “detecting a change in distance” as asserted by Appellant. Appeal Br. 8. Instead claim 6 recites “detecting movement . . . wherein the movement changes the length of the distance that the input instrument is hovering . . . [and] wherein the action that is performed is based on the change of the length.” Claim 6 (Appeal Br. 11 (Claims App.)). We broadly but reasonably construe claim 6 to require that an action (to be performed) be based on a movement that changes the hovering distance (distance from the device screen).

Accordingly, we disagree with Appellant that the Examiner-cited portions of Joo (*see* Final Act. 7–11 (citing Joo ¶¶ 64–66, 87, 94, 95, 175, 193; Figs. 1, 2, 4, 17, 20A–20B)) do not disclose “detecting a movement of the hovering input instrument over the input location, wherein the movement changes the length of the distance that the input instrument is hovering over

the input location, wherein the action that is performed is based on the change of the length” as recited in claim 6 (Appeal Br. 11 (Claims App.)). That is, we disagree with Appellant’s contention that Joo does not disclose detecting a change in distance (*see* Appeal Br. 7–8; Reply Br. 3) because claim 6 does not require detecting a change in distance (*supra*), but instead requires performing an action “based on [a] change of . . . length” (claim 6) where an input instrument’s movement changes the length of the distance that the input instrument is hovering. *See e.g.*, Spec. ¶ 43 (“The process determines . . . whether the input instrument has moved up or down changing the distance (z-position) from the surface of the screen” and, “[f]or example,” “zoom[s] in as the input instrument is moved towards the screen surface and zoom[s] out as the input instrument is moved away from the screen surface.”). The Examiner-cited portions of Joo describe different inputs based on different measured distances. *See* Joo ¶¶ 64–66, 87, 94, 95, 175; Figs. 1, 2, 4; Final Act. 7–9; Ans. 6–8. Joo also describes detecting a movement direction of a hovering input instrument and performing an action based on the movement direction—Joo describes a detecting distance (3D location) and a pattern (pattern of moving toward a device) and transmitting that information to a second device to perform an operation—for example, zoom in on (increase the scale of) a map. *See* Joo ¶¶ 192, 193, 195; Figs. 20A, 20B.

Accordingly, Appellant’s contentions do not persuade us of error in the Examiner’s anticipation rejection of representative independent claim 6. Therefore, we affirm the Examiner’s rejection of representative claim 6, as well as claims 7, 13, 14, and 20, not separately argued with particularity (*supra*).

CONCLUSION

We decline to reach the provisional non-statutory obviousness-type double patenting rejection of claims 1, 8, and 15. *See* n.5, *supra*. We determine that claims 15, 16, and 18–20 recite statutory subject matter. We also determine that claims 1, 2, 4–9, 11–16, and 18–20 are anticipated by the cited prior art (Yun and/or Joo).

Appellant has not shown that the Examiner erred in rejecting claims 1, 2, 4–9, 11–16, and 18–20 under 35 U.S.C. § 102(a)(2). Appellant has shown that the Examiner erred in rejecting claims 15, 16, and 18–20 under 35 U.S.C. § 101. We therefore sustain the Examiner’s rejection of claims 1, 2, 4–9, 11–16, and 18–20.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/ Basis	Affirmed	Reversed
1, 8, and 15		Provisional OTDP US 14/294,792 and Yun ⁶		
15, 16, 18–20	101	Eligibility		15, 16, 18–20
1, 2, 4, 8, 9, 11, 15, 16, 18	102(a)(2)	Yun	1, 2, 4, 8, 9, 11, 15, 16, 18	
1, 5–8, 12–15, 19, 20	102(a)(2)	Joo	1, 5–8, 12–15, 19, 20	
Overall Outcome			1, 2, 4–9, 11–16, 18–20	

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED

⁶ We determine this issue is not ripe for decision. *See* n.5, *supra*.