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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/071,269	11/04/2013	Hanan SAMET	058501.00086	4463
32294	7590	06/29/2020	EXAMINER	
SQUIRE PB (DC Office) ATTN: IP Department 2550 M Street, NW Washington, DC 20037			CASILLAS, ROLAND J	
			ART UNIT	PAPER NUMBER
			2141	
			NOTIFICATION DATE	DELIVERY MODE
			06/29/2020	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* HANAN SAMET and BRENDAN C. FRUIN

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Appeal 2019-000928  
Application 14/071,269  
Technology Center 2100

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Before ALLEN R. MacDONALD, DEBRA K. STEPHENS, and  
ADAM J. PYONIN, *Administrative Patent Judges*.

STEPHENS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the  
Examiner's decision to reject claims 1, 3–11, and 13–20 (*see* Final Act. 4).

We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as University of Maryland, Office of Technology Commercialization (Appeal Br. 3).

### CLAIMED SUBJECT MATTER

The claims are directed to one-handed operation and particularly to determining a used hand of a user of a device and modifying a graphical user interface of the device based on the used hand determined (Spec., Abstract, ¶ 7). Claims 1 and 20, reproduced below, are illustrative of the claimed subject matter:

1. A method, comprising:

identifying a tilt of a device;

determining an actually used hand of a user of the device, wherein an identified tilt of the device is used in determination of the actually used hand; and

modifying a graphical user interface of the device based on the determined used hand, wherein determination of the used hand occurs prior to any querying of the user regarding the used hand of the user.

20. A method, comprising:

identifying the initiation of a contact to a surface of a touch interface;

setting an area of a display as selected point based on the contact;

identifying a motion of the contact along the surface in a first device;

moving a virtual wheel in response to the motion; and

automatically selecting an item at the selected point when the virtual wheel stops.

## REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Kerr	US 2006/0197750 A1	Sept. 7, 2006
Park	US 2007/0296704 A1	Dec. 27, 2007
Lee	US 2008/0186808 A1	Aug. 7, 2008
Matthews	US 2009/0183107 A1	July 16, 2009
Kim	US 2013/0111384 A1	May 2, 2013
Akifusa	US 2013/0252736 A1	Sept. 26, 2013

## REJECTIONS

Claims 1, 3, 4, 10, 11, 13, 14, and 19 are rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Kim and Kerr (Final Act. 4–10);

Claims 5–7, 15, and 16 are rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Kim, Kerr, and Matthews (*id.* at 10–12);

Claims 8–9 and 17–18 are rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Kim, Kerr, and Akifusa (*id.* at 12–15); and

Claim 20 is rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Park and Lee (*id.* at 15–16).

We have only considered those arguments that Appellant actually raised in the Briefs. Arguments Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived (*See* 37 C.F.R. § 41.37(c)(1)(iv)).

## OPINION

*35 U.S.C. § 103(a): Claims 1, 3, 4, 10, 11, 13, 14, and 19*

Appellant contends the invention as recited in claims 1, 3, 4, 10, 11, 13, 14, and 19, is not obvious over Kim and Kerr (Appeal Br. 7). The issue

presented by Appellant’s arguments is whether the combination of Kim and Kerr teaches or suggests “wherein an identified tilt of the device is used in determination of the actually used hand” as recited in claim 1 (Appeal Br. 26, claim 1). More specifically, Appellant argues:

Kim does not use the tilt information to determine an actually used hand. Furthermore, the tilt described in Kim is not subsequently used in the determination of an actually used hand. In fact, Kim nowhere discloses or suggests determining an actually used hand, either by the use of tilt or by any other mechanism.

(Appeal Br. 9–10). Moreover, according to Appellant, “Kerr does not disclose or suggest using an identified tilt of a device in such a determination [referring to a determination of an actually used hand]” (*id.* at 10).

We do not find Appellant’s argument persuasive. Kim discloses “if a degree of tilt detected by the sensor exceeds a threshold, a controller within device 10 recognizes that the device has become inclined, i.e., has entered a tilted state” (Kim ¶ 24). Kim further discloses:

[I]n a case where the device is *held in the left hand* and tilted left (inclined such that a left side is lower than a right side), the controller 24 provides control such that the icons are arranged lopsidedly to the left side of the touch screen

(*id.* ¶ 43 (emphasis added); *see* Final Act. 4). Therefore, we determine Kim discloses the ability to detect that a device has been tilted in a certain direction.

Appellant points to Figure 1 and paragraphs 17 and 24 of the Specification as disclosing the disputed limitation (Appeal Br. 5–6). Paragraph 17 of the Specification states the method “determi[n]es a used

hand of a user of a device” and Figure 1 illustrates general steps to be performed and their relationship to each other. Indeed, the Specification does not provide any details with regards to the argued feature; rather, the Specification discloses:

The method can further include, at 130, identifying a tilt of the device, wherein an identified tilt of the device is used in determination of the used hand. For example, when the tilt of the device is about seventy degrees from a horizontal level, the determining comprises determining the used hand to be a right hand

(Spec. ¶ 24). The Specification further describes “[t]he method . . . modif[ies] a graphical user interface of the device based on the determined used hand” (*id.* ¶¶ 17, 20–22). Thus, like Kim, the Specification describes determining the tilt of the device and based on that determination, modifying the graphical interface. Thus, Appellant’s contention that Kim fails to disclose “an identified tilt of the device is used in determination of the actually used hand” is unpersuasive as both the Specification and Kim disclose the same steps. Although Kim does not explicitly disclose determining the “actually used hand,” Kim is performing the same steps as recited in the claims, in light of the Specification. Appellant’s argument that “Kim describes that the user can choose in advance (prior to determining if there is a tilt) the specific settings related to a desired hand that the user would like to use” (Reply Br. 4) is similarly unpersuasive. Appellant is arguing the “labeling” of the tilt as left-handed or right-handed patentably distinguishes from Kim; however, both the claims and Kim perform the same steps. Thus, we determine Kim teaches or suggests the disputed limitation.

Further, Kerr teaches determining which hand (right or left) is being used to hold the device based on a “current hand signal” (*see* Kerr ¶ 115; Ans. 5). Thus, we determine Kerr teaches determining “handedness” based on various criteria acquired from the user device. Appellant argues “Kerr does not disclose or suggest using an identified tile of a device in such a determination” and “the determination of the handedness of the user is based on a determination of whether the user is touching the device” (Reply Br. 4); however, the Examiner is relying on the combination of Kim and Kerr (*see In re Merck & Co., Inc.*, 800 F.2d 1091, 1097(Fed. Cir. 1986) (one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references)).

Accordingly, we are not persuaded the Examiner erred in finding the combination of Kim and Kerr teaches or suggests “wherein an identified tilt of the device is used in determination of the actually used hand,” as recited in independent claim 1, commensurately recited in independent claim 11, and dependent claims 3, 4, 10, 13, 14, and 19, not separately argued. Therefore, we sustain the rejection of claims 1, 3, 4, 10, 11, 13, 14, and 19 under 35 U.S.C. § 103(a) for obviousness over Kim and Kerr.

*35 U.S.C. § 103(a): Claim 20*

Appellant contends the invention as recited in claim 20, is not obvious over Park and Lee (Appeal Br. 20). The issue presented by Appellant’s arguments is whether the combination of Park and Lee teaches or suggests “automatically selecting an item at the selected point when the virtual wheel stops,” as recited in claim 20 (Appeal Br. 30, claim 20). More specifically, Appellant argues “while Park may describe the use of selection with a

virtual wheel keypad, the selection in Park is not based on where a contact motion started. Instead, in Park, selection is based on rotating a wheel key . . . not a virtual wheel with some item to be selected” (Appeal Br. 22).

According to Appellant, “even if the time of day were treated as the item to be selected, the selection in Lee is based on where the contact motion *ends*, not where the contact motion *begins*” (*id.*, emphasis added).

We are not persuaded. The Examiner finds

[t]he system [of Lee] determines the initial contact with the interface based on the selection point (i.e. clock hand selection), identifies motion of the selection (i.e. moving the clock hand), and *select[s] an item based on the stop location* (i.e. selecting or determining the time based on the clock hand stop location)

(Ans. 6, emphasis added). Thus, Appellant appears to argue the phrase “automatically selecting an item at the selected point when the virtual wheel stops” should be construed as performing the automatic selection where the user initially touched the touch interface whereas the Examiner appears to interpret this limitation as performing the automatic selection where the user stopped the touching of the touch interface. Appellant identifies Figure 4, element 450 and paragraph 73 of the Specification as disclosing this feature (Appeal Br. 6). Figure 4, element 450 provides a box labeled with a step “Automatically Select Item when Wheel Stops” and paragraph 73 of the Specification describes:

The method can also include, at 450, automatically selecting an item at the selected point when the virtual wheel stops. The motion of the wheel can be controlled precisely by the motion of the user or the wheel can freely spin for a while after the user releases contact. When the wheel stops the selection can occur automatically, for example by treating the area as if it had been clicked by the user.



Thus, no additional description is provided. Nonetheless, even if we accepted Appellant’s interpretation, we are not persuaded the Examiner erred. In particular, Park discloses the claimed “selected point” (*see* Final Act. 15 (citing Fig. 1, item 40; ¶ 41)) and, specifically, Park discloses “[t]he screen highlight 40 indicates a specific position on the virtual wheel keypad 30 to select a virtual key 31” (Park ¶ 41). Park further describes “it is identified whether a wheel key 21 rotates in step S13. If the wheel key 21 rotates as shown in Fig. 3A, the virtual wheel keypad 30 rotates correspondingly in step S14” (*id.* ¶ 42). Additionally, Park discloses:

After the rotation of the virtual wheel keypad 30 ... it is identified whether a selection key 22 is *pressed* in step S15. If the selection key 22 is *pressed* in Fig. 3B, a virtual key located at the screen highlight 40 is selected from virtual keys 31, and a character allocated to the selected virtual key is input at the position of the cursor 50

(*id.* ¶ 43 (emphases added)). Thus, Park discloses selecting (i.e., by pressing the selection key 22) an item (i.e., the virtual key 31 that ends up within the screen at the selected point (i.e., the screen highlight 40)) when the virtual wheel stops.

Although Park teaches a physical wheel 21 operated by the user, the Examiner additionally relies on Lee to teach “initiation of a contact to a surface of a touch interface” (Final Act. 15–16 (citing Fig. 3, items 310 and 320; ¶¶ 38–39)). Lee describes a user may initiate contact with a touch interface 12 such that a time may be changed (Lee, Fig. 6; ¶ 47; Final Act. 15). Appellant contends “the selection in Lee is based on where the contact motion ends, not where the contact motion begins” (Appeal Br. 22). However, the Examiner is relying on the combination of references to teach

the disputed limitation. More specifically, the Examiner relies on Lee to teach “setting an area of display as selected point based on the contact” (Final Act. 16). Lee describes “user contact with the display is detected” and “adjusting the displayed portion . . . responsive to relative locations on the display that the user contact occurs” (Lee ¶¶ 38–39). Therefore, the combination of Park and Lee teaches “automatically selecting an item . . . at the selected point when the clock hand stops” (Park ¶ 43; Lee ¶ 50; Final Act. 15–16).

Accordingly, we are not persuaded the Examiner erred in finding the combination of Park and Lee teaches, suggests, or otherwise renders obvious the limitation as recited in claim 20. Therefore, we affirm the rejection of claim 20 under 35 U.S.C. § 103(a) for obviousness over Park and Lee.

#### CONCLUSION

The Examiner’s rejections are affirmed.

More specifically,

The rejection of claims 1, 3, 4, 10, 11, 13, 14, and 19 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Kim and Kerr is affirmed.

The rejection of claims 5–7, 15, and 16 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Kim, Kerr, and Matthews is affirmed.

The rejection of claims 8–9 and 17–18 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Kim, Kerr, and Akifusa is affirmed.

The rejection of claim 20 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Park and Lee is affirmed.

DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 3, 4, 10, 11, 13, 14, 19	103(a)	Kim and Kerr	1, 3, 4, 10, 11, 13, 14, 19	
5-7, 15, 16	103(a)	Kim, Kerr, Matthews	5-7, 15, 16	
8-9, 17-18	103(a)	Kim, Kerr, Akifusa	8-9, 17-18	
20	103(a)	Park and Lee	20	
<b>Overall Outcome:</b>			1, 3-11, 13-20	

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) (*see* 37 C.F.R. § 1.136(a)(1)(iv)).

AFFIRMED