



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/178,405	02/12/2014	Joseph Robert Parker	RPS920130227USNP(710.319)	1091
58127	7590	12/23/2019	EXAMINER	
FERENCE & ASSOCIATES LLC			XIAO, DI	
409 BROAD STREET			ART UNIT	PAPER NUMBER
PITTSBURGH, PA 15143			2141	
			MAIL DATE	DELIVERY MODE
			12/23/2019	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOSEPH ROBERT PARKER

Appeal 2019-000084
Application 14/178,405
Technology Center 2100

Before ELENI MANTIS MERCADER, NORMAN H. BEAMER, and
GARTH D. BAER, *Administrative Patent Judges*.

BAER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's Final rejection of claims 1–19, which are all pending claims. Appeal Br. 11. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

BACKGROUND

A. The Invention

Appellant's invention is directed to operating a “keyboard displayed on a touch screen device” in which “[t]he soft keys of the keyboard may be pressed to enter character inputs such as letters, numbers and symbols.”

Spec. ¶ 1. Independent claims 1 and 15 are representative and reproduced below, with emphasis added to disputed elements:

1. A method, comprising:
 - detecting, at a touch sensitive surface of an information handling device, a multi-touch input to a soft keyboard; and
 - rendering an alternative input mapped to the multi-touch input;
 - said *multi-touch input comprising two or more substantially simultaneous touch inputs to one or more character soft keys.*

15. A method, comprising:
 - detecting, at a touch sensitive surface of an information handling device, a multi-touch input to a soft keyboard; and
 - rendering an alternative input mapped to the multi-touch input;
 - said multi-touch input being a sequential multi-touch input comprising a first touch input provided to a

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Lenovo (Singapore) PTE. LTD. as the real party in interest. Appeal Br. 3.

Appeal 2019-000084
Application 14/178,405

control soft key and a second touch input to a character soft key *during a continuation of said first touch input*; wherein said rendering an alternative input mapped to the multi-touch input comprises rendering alternative inputs for a duration of time during which the first touch input is detected at the control soft key.

Appeal Br. 19, 21 (Claims Appendix).

B. The Rejections on Appeal

The Examiner newly rejects claims 1–14 under 35 U.S.C. § 112(b) as being indefinite. Ans. 3.

The Examiner newly rejects claims 1, 3, 7, 9, 14, and 15 under 35 U.S.C. § 101 because the claimed invention is not directed to patent eligible subject matter. Ans. 4.

The Examiner rejects claims 1, 3, 7, 9, 13, and 14 under 35 U.S.C. § 102(a)(2) as being anticipated by Shi (US 8,949,731 B1; Feb. 2, 2015). Final Act. 3.

The Examiner rejects claims 2, 4, 5, 8, 10, and 11 under 35 U.S.C. § 103 as being unpatentable over Shi and Glazkova (US 2006/0267805 A1; Nov. 30, 2006). Final Act. 9.

The Examiner rejects claim 6 under 35 U.S.C. § 103 as being unpatentable over Shi and Griffin (US 2013/0120266 A1; May 16, 2013). Final Act. 15.

The Examiner rejects claim 12 under 35 U.S.C. § 103 as being unpatentable over Shi, Glazkova, and Griffin. Final Act. 16.

The Examiner rejects claims 15, 16, 18, and 19 under 35 U.S.C. § 103 as being unpatentable over Berenger (US 2012/0200503 A1; Aug. 9, 2012) and Olsen (US 2003/0189551 A1; Oct. 9, 2003). Final Act. 16.

The Examiner rejects claim 17 under 35 U.S.C. § 103 as being unpatentable over Berenger, Olsen, and Griffin. Final Act. 22.

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellant’s arguments. Arguments Appellant could have made but chose not to make are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Except where noted, we adopt the Examiner’s findings and conclusions as our own, and add the following primarily for emphasis.

A. Indefiniteness Rejection of Claims 1–14

The Examiner finds that “[i]t is unclear what constitutes ‘substantially simultaneous touch inputs’” (Ans. 3) because “[i]t is unclear what is ‘a predetermined time less than an average time used to provide sequential inputs’. It is unclear what constitutes this average time number and how to arrive at this number.” Ans. 4 (citing Spec. ¶ 17).

Appellant argues that “the term substantially simultaneously is intended to capture those inputs that are provided at the ‘same’ time as referenced by the processing of a typical computer system.” Reply Br. 15 (noting that “the specification states ‘such as *detected* at the same time’” (emphasis in original)).

We agree with Appellant. One skilled in the art, having read the Appellant’s disclosure, would understand the term “substantially simultaneous touch input” as meaning “detected at the same time or within a predetermined time less than an average time used to provide sequential inputs.” Spec. ¶ 17.

B. Ineligible Subject Matter Rejection of Claims 1, 3, 7, 9, 14, and 15

The Examiner determines that “[independent claims] 1, 7, 14 are directed to a method, a system, and a product respectively that are directed to the abstract idea of ‘rendering’ (i.e., displaying) an ‘alternative input’ based on received inputs (i.e., the ‘multi touch input’).” Ans. 4–5. The Examiner determines that independent claim 15 is also directed to the abstract idea of rendering an alternative input based on received inputs. Ans. 7. The Examiner further finds that

[t]he claimed subject matter is not meaningfully different from collecting information (detecting input to a soft keyboard), analyzing it, (based on the input, determining an alternative input rendering), and displaying certain results of the collection and analysis (rendering the alternative display) as in [*Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016)] or generating a second menu (the alternative display) from a first menu (the initial display) as in [*Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (Fed. Cir. 2016)].

Ans. 5; *see also Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014) (describing the two-step framework “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts”).

After the docketing of this appeal, the USPTO published revised guidance on the application of § 101 (“Guidance”). *See* USPTO’s 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Memorandum”). Pursuant to the Guidance “Step 2A,” the office first looks to whether the claim recites:

- (1) Prong One: any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of

Appeal 2019-000084
Application 14/178,405

organizing human activity such as a fundamental economic practice, or mental processes); and

(2) Prong Two: additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the Office then (pursuant to the Guidance “Step 2B”) look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that are not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Memorandum Section III.

As outlined below, we disagree with the Examiner.

1. Step 2A

Appellant argues that “the Office fails to specifically point out the factors that are relied upon in making the determination that the claims are directed to an abstract idea” and the Office has made “a broad overgeneralization of the claims.” Reply Br. 16.

Prong One

Pursuant to Step 2A, Prong One of the Guidance, we do not conclude independent claims 1, 7, 14, and 15 recite an abstract idea. *See* Memorandum Section III(A)(1) (Prong One: Evaluate Whether the Claim Recites a Judicial Exception), 84 Fed. Reg. at 54. Independent claim 1 recites

1. A method, comprising:
 - detecting, at a touch sensitive surface of an information handling device, a multi-touch input to a soft keyboard; and
 - rendering an alternative input mapped to the multi-touch input;said multi-touch input comprising two or more substantially simultaneous touch inputs to one or more character soft keys.

The claim does not recite “mathematical concepts,” “certain methods of organizing human activity,” or “mental processes” as recognized by the Guidance. *See* Memorandum, 84 Fed. Reg. at 52.

We additionally find the claim recites features that distinguish the claim from both the *Electric Power Group* and *Ameranth* cases cited by the Examiner. The claimed “rendering an alternative mapped to the multi-touch input” is used to allow the user to easily input non-standard characters for further processing, and is not merely information display, or “an ancillary part of such collection and analysis,” as in *Electric Power Group*. *See Electric Power Group*, 830 F.3d at 1354. The claimed “detecting, at a touch sensitive surface of an information handling device, a multi-touch input to a soft keyboard” provides the method step that triggers the alternative mapping for accepting input, and thus claims a method for achieving the result, unlike *Ameranth*, in which “the claims are directed to certain functionality—here, the ability to generate menus with certain features.” *See Ameranth*, 842 F.3d at 1241. We arrive at the same result for independent claims 7, 14, and 15.

Because claim 1 “does not recite a judicial exception,” “the claim is eligible at Prong One of revised Step 2A.” Memorandum, 84 Fed. Reg. at 54. Accordingly, we do not sustain the Examiner’s patent eligibility

Appeal 2019-000084
Application 14/178,405

rejection of independent claims 1, 7, 14, and 15, and dependent claims 3 and 9.

C. Anticipation Rejection of Claims 1, 3, 7, 9, 13, and 14

Appellant argues that “Shi teaches a system that can distinguish between either a single touch input or a double touch input, which it appears that the Office is equating to the multi-touch input of the claimed limitations.” Reply Br. 25.

We do not find this argument persuasive. The Examiner finds that Shi discloses “substantially simultaneous input is within milliseconds.” Ans. 10 (citing Shi ¶ 39). The Examiner further finds that because “the claim language states that wherein ‘said multi-touch input comprising two or more substantially simultaneous touch inputs to **one** or more character soft keys,’” it follows that “the substantially simultaneous touch inputs in one of the claimed [scenarios] is on one key,” and “it will then have to be a double-tap.” Ans. 10 (emphasis in original).

We agree with the Examiner that a fast double tap on a single character soft key, occurring in “less than an average time used to provide sequential inputs” in Appellant’s claimed method would meet the definition of ‘touch input comprising two or more substantially simultaneous touch inputs to **one** character soft key’ and thus trigger the “rendering [of] an alternative input” and produce the same result as a double-tap gesture in Shi.

Accordingly, the claim’s scope encompasses Shi’s method, and we sustain the Examiner’s anticipation rejection of independent claims 1, 7, 14, as well as dependent claims 3, 9, 13, and 14, and dependent claims 2, 4, 5, 6, 8, and 10–12 not argued separately. *See* Appeal Br. 12–17.

D. Obviousness Rejection of Claim 15

Appellant first argues that the Office “has not provided a satisfactory explanation for the motivation finding that includes an express and rational connection with the evidence presented” (Reply Br. 27 (citing *In re NuVasive*, 842 F.3d 1376 (Fed. Cir. 2016))) and “the references do not suggest some motivation to be combined with another reference.” Reply Br. 28.

We do find this argument persuasive. The Examiner finds, and we agree, that

[i]t would have [been] obvious to one of ordinary skill in the art, at the time the filing was made to apply Olsen to Berenger so the user would be able to control how long the alternative keys are displayed without having to reenter the display mode when the time expires.

Final Act. 19. Further, there is no requirement that a reference must suggest the motivation to combine expressly, as the Supreme Court has rejected a “rigid” application of the “teaching, suggestion, or motivation” test. *See KSR Intern. Co. v. Teleflex Inc.*, 550 U.S. 398, 418–19 (2007). Here, the Examiner’s findings are reasonable—a skilled artisan would “be able to fit the teachings of multiple patents together like pieces of a puzzle” because they are “a person of ordinary creativity, not an automaton.” *KSR*, 550 U.S. at 420–21. Appellant has not shown error in the Examiner’s finding.

Appellant further contends “the Office has ignored the phrase ‘multi-touch input’” (Reply Br. 28) because claim 15 states “a second touch input to a character soft key during a continuation of said first touch input” (Reply Br. 28 (emphasis in original)), whereas

Berenger teaches that “if the user has actuated the secondary character key 440 prior to long-pressing a virtual character key

such that all of the virtual character keys are displayed as capitalized characters, and then the user long-presses one of the virtual character keys, the breakout box will display the additional characters as capitalized additional characters.”

Reply Br. 29 (quoting Berenger ¶ 68).

We do not find this argument persuasive. The Examiner finds, and we agree, that “Olsen [teaches] the aspect of a first touch input provided to a control soft key and a second touch input to a function key during a continuation of said first touch” (Final Act. 18 (citing Olsen ¶ 43)) and thus “rendering alternative icons for a duration of time during which the first input is detected at the control key.” Final Act. 19 (citing Olsen ¶ 43). Appellant attacks Berenger individually. “[O]ne cannot show non-obviousness by attacking references individually where . . . the rejections are based on combinations of references.” *In re Keller*, 642 F.2d 413, 426 (CCPA 1981).

Accordingly, we sustain the Examiner’s obviousness rejection of claim 15, as well as dependent claims 16–19 not argued separately. *See* Appeal Br. 14–17.

CONCLUSION

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–14	112(b)	indefiniteness		1–14
1, 3, 7, 9, 14, 15	101	patent ineligible		1, 3, 7, 9, 14, 15
1, 3, 7, 9, 13, 14	102(a)(2)	Shi	1, 3, 7, 9, 13, 14	
2, 4, 5, 8, 10, 11	103	Shi, Glazkova	2, 4, 5, 8, 10, 11	

Appeal 2019-000084
Application 14/178,405

6	103	Shi, Griffin	6	
12	103	Shi, Glazkova, Griffin	12	
15, 16, 18, 19	103	Berenger, Olsen	15, 16, 18, 19	
17	103	Berenger, Olsen, Griffin	17	
Overall Outcome			1-19	

In summary:

The Examiner's decision is affirmed because we have affirmed at least one ground of rejection with respect to each claim on appeal. *See* 37 C.F.R. § 41.50(a)(1).

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).

AFFIRMED