



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.
13/567,554	08/06/2012	Ashley Colley	042933/423611	7299
10949	7590	06/16/2020	EXAMINER	
Nokia Corporation and Alston & Bird LLP c/o Alston & Bird LLP Bank of America Plaza, 101 South Tryon Street Suite 4000 Charlotte, NC 28280-4000			NGUYEN, CHAU T	
			ART UNIT	PAPER NUMBER
			2177	
			NOTIFICATION DATE	DELIVERY MODE
			06/16/2020	ELECTRONIC

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.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptomail@alston.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ASHLEY COLLEY

Appeal 2019-002239
Application 13/567,554
Technology Center 2100

Before JAMES B. ARPIN, ADAM J. PYONIN, and SCOTT RAEVSKY,
Administrative Patent Judges.

ARPIN, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a), the Examiner’s final rejections of claims 1–8, 10–13, and 16–33. Final Act. 2.² Claims 9, 14, and 15 are canceled. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ “Appellant” here refers to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party-in-interest as Nokia Technologies Oy. Appeal Br. 2.

² In this Decision, we refer to Appellant’s Appeal Brief (“Appeal Br.,” filed July 23, 2018); the Final Office Action (“Final Act.,” mailed June 28, 2017) and the Examiner’s Answer (“Ans.,” mailed November 19, 2018); and the Specification (“Spec.,” filed August 6, 2012). Rather than repeat the Examiner’s findings and determinations and Appellant’s contentions in their entirety, we refer to these documents.

STATEMENT OF THE CASE

Appellant’s claimed methods, apparatus, and computer-readable memory media “relate[] to responding to selection of a displayed character string.” Spec., 1:4. In particular,

The method may comprise, subsequent to predicting the location for modification, positioning a cursor within the selected character string based on the predicted location.

The displayed character string may be a correctly spelled word.

In a second aspect, this specification describes apparatus comprising at least one processor and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to cause a character string to be displayed on a display, to receive a signal indicative of user input for selecting the displayed character string *and to respond to the signal by using a language engine to predict a location within the selected character string for modification of the selected character string.*

Id. at 2:26–32 (emphases added).

As noted above, claims 1–8, 10–13, and 16–33 stand rejected.

Claims 1, 16, and 33 are independent. Appeal Br. 11 (claim 1), 16 (claim 13), 15 (claim 30) (Claims App.). Claims 2–8, 10–13, and 31–33 depend directly or indirectly from claim 1; and claims 17–29 depend directly or indirectly from claim 16. *Id.* at 11–16.

Claim 1 recites “[a] method”; claim 12 recites an “[a]pparatus comprising at least one processor and at least one non-transitory memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus” to perform the steps of claim 1; and claim 30 recites “[a]t least one non-transitory computer readable memory medium having computer

readable instructions stored thereon, the computer readable instructions, when executed by at least one processor, causing the at least one processor” to perform the steps of claim 1. *Id.* at 11, 13, 15. The Examiner relies on the same references and substantially similar arguments in rejecting claims 1, 16, and 30 (Final Act. 2–5, 7); and, with the exception of claims 32 and 33, Appellant does not contest the rejections of claims 2–8, 10–13, 17–29, and 31 separately from claim 1 (*see* Appeal Br. 8).

Claim 1, reproduced below with disputed limitations emphasized, is representative.

1. A method comprising:

causing a character string to be displayed on a display, the character string being a word recognized as being spelled correctly;

receiving a signal indicative of user input for selecting and allowing for modifying of the displayed character string;

responding to the signal by using a language engine to predict a most probable location of an error within the selected character string; and

positioning a cursor within the selected character string based on the predicted most probable location of an error to allow for modification of the selected character string.

Id. at 11 (emphasis added).

REFERENCES AND REJECTION

The Examiner relies upon the following references in rejecting the claims:

Name ³	Number	Publ'd/Issued	Filed
Williams	US 7,155,683 B1	Dec. 26, 2006	Feb. 22, 2000
Nordenhake	US 2006/0206816 A1	Sept. 14, 2006	Mar. 11, 2005
Huang	US 2010/0292984 A1	Nov. 18, 2010	Sept. 22, 2008

Specifically, claims 1–8, 10–13, and 16–33 are rejected as unpatentable under 35 U.S.C. § 103 over the combined teachings of Nordenhake, Huang, and Williams. Final Act. 2–8.

Appellant contests the obviousness rejection of independent claim 1 (Appeal Br. 6–8) and relies on the alleged deficiencies in that rejection to overcome the rejection of the independent claims 16 and 30 and of the dependent claims (*id.* at 8). Because we determine that reversal of the rejection of independent claim 1 is dispositive, except for our ultimate decision, we do not discuss the merits of the rejections of claims 2–8, 10–13, and 16–33 further herein. We review the appealed rejection of independent claim 1 for error based upon the issues identified by Appellant, and in light of the contentions and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential). We address the rejection of claim 1 below.

ANALYSIS

1. Obviousness of Claim 1 Over Nordenhake, Huang, and Williams

As noted above, the Examiner rejects independent claim 1 as obvious

³ All reference citations are to the first named inventor only.

over the combined teachings of Nordenhake, Huang, and Williams. Final Act. 3–4. The Examiner finds that Nordenhake and Huang teach or suggest the majority of the limitations of claim 1. *Id.* at 2–4. Nevertheless, the Examiner finds, “Nordenhake and Huang . . . do not disclose ‘predict a *most probable location of an error* within the selected character string; and *positioning the selected character string based on the predicted most probable location of an error to allow* for modification of the selected character string.’” *Id.* at 4 (emphasis in original); *see* Ans. 10–11.

As noted above, claim 1 recites,

responding to the signal by using a language engine to *predict a most probable location of an error within the selected character string*; and

positioning a cursor within the selected character string based on the predicted most probable location of an error to allow for modification of the selected character string.

Appeal Br. 11 (Claims App.) (emphases added). The Examiner finds, because “the character string being a word recognized as being spelled *correctly*” (*id.* (emphasis added)), there is no “error” in the displayed character string (Ans. 10). Consequently, the Examiner interprets the term “location of error” as a “desired location.” *Id.*

Given the Examiner’s interpretation of the term “location of an error,” the Examiner finds:

In the same field of endeavor, Williams further discloses if the user wants to add a new word to the end or beginning of an existing word by using the predictive editor program, this is simply done by first moving the cursor to the end or beginning (**location or position**) of the existing word, and from here the user simply starts typing the new word (col. 9, lines 5-9). William further discloses the editor application open[s] the already written word for editing with the predictive editor

program by placing the cursor in the desired position (**most probable location of an error**), then the editor application regenerates the sequence of key strokes based on the presently displayed matching word, and when the editor application adds new key strokes to the regenerated sequence of key strokes in dependence of the position of the cursor and the key pressed, this new string is used by the predictive editor program to find new matched (col. 9, lines 10-31).

Ans. 11 (emphasis in original); *see* Final Act. 4. The Examiner concludes that a person of ordinary skill in the art would have had reason to combine the teachings of Williams with those of Nordenhake and Huang to achieve the method of claim 1. Final Act. 5; Ans. 11.

Initially, we determine the Examiner erred in interpreting the term “location of an error” as “desired location” in claim 1 for two reasons. First, the Examiner’s interpretation improperly reads the word “error” out of Appellant’s claim and results in an unreasonably broad interpretation of this term. The Examiner may not ignore the words chosen by Appellant in interpreting the claim terms. *See Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.”) *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed. Cir. 2004) (stating that interpretations of claims rendering claim terms superfluous is generally disfavored).

Second, the Examiner’s interpretation is not consistent with the Specification’s disclosure. *In re Morris*, 127 F.3d 1048, 1053 (Fed. Cir. 1997) (“[T]he PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be

afforded by the written description contained in the applicant's specification.”). In Figures 2A–2C of the application, a series of character strings reading, “The jail stones were falling,” is displayed in the text display region of a mobile device. Spec., 7:15–18, Figs. 2A-2C. The Specification explains:

The series of words 200 displayed in the text display region 20-1 says “The jail stones were falling”. This is the result of an error by the user who intended to type “hail” instead of “jail”. However, the mistake was easy to make because the “h” and “j” keys are located beside one another on the virtual keyboard 20-2. Also, because “jail” is a real word, the language engine 16 did not recognise it as a mistake and so did not correct it automatically.

Id. at 7:34–8:3. Although the user spelled “jail” correctly, the word contains an error. The user intended to type “hail,” but incorrectly typed “j,” instead of “h.” Thus, the “location of an error” in the correctly spelled word “jail” is the letter “j” in the word “jail.” *See also id.*, Figs. 4A–4C (“fat” typed, instead of “cat”), 6A–6C (“car” typed, instead of “cab”), 9A–9B (“fame” typed, instead of “game”). In most of the depicted instances, the key for the correct letter is located adjacent to the key for the incorrect letter. Moreover, Figure 9C depicts the positioning of cursor 96 at the location of an error, i.e., adjacent to the letter “f” in “fame.” *Id.* at 18:6–13, Fig. 9C. Consequently, we interpret the term “location of an error” to encompass the location of a mistyped letter in an otherwise correctly spelled word.

As noted above, the Examiner finds Williams teaches or suggests “*predict[ing] a most probable location of an error*” within the selected character string and *positioning the selected character string based on the predicted most probable location of an error* to allow for modification of

the selected character string.” Ans. 10–11 (citing Williams, 9:5–31); *see* Final Act. 4. We disagree.

Williams discloses:

If the user moves the cursor 70 through several consecutive spaces, the cursor 70 will be moved one space at a time. Also, when moving through symbols, numbers, etc., the cursor is moved one character at a time.

If the user wants to add a new word to the end or beginning of an existing word by using the predictive editor program, this is simply done by first moving the cursor to the end or beginning of the existing word, respectively. From here, the user simply starts typing the new word.

The editor application opens the already written word for editing with the predictive editor program by placing the cursor in the desired position. Then the editor application regenerates the sequence of key strokes based on the presently displayed matching word. When the editor application adds new key strokes to the regenerated sequence of key strokes in dependence of the position of the cursor and the key pressed. [T]his new string is used by the predictive editor program to find new matches.

If the user wants to edit an existing word by using the predictive editor program, this is done first by moving the cursor just after the word (activating the word in question causing it to be underlined). Then the user can directly add e.g. an ending to the word or if desired, can delete characters by pressing the clear key 9.

Williams, 9:1–24 (emphasis added). Thus, Williams discloses that the user chooses where to begin typing, and the predictive editor merely places the cursor at the position *desired by the user*.

Appellant contends,

the Examiner suggests that “Williams further discloses the editor application open[s] the already written word for editing with the predictive editor program by placing the cursor *in the desired*

position (most probable location of an error), then the editor application regenerates the sequence of key strokes based on the presently displayed matching word . . .’ This assertion is incorrect. The Examiner’s added wording “(most probably location of an error)” to the words “desired position” when referring to Williams is presumably done because there is no passage in Williams that can [explicitly] or implicitly achieve “responding to the signal by using a language engine to predict a most probable location of an error within the selected character string and positioning a cursor within the selected character string based on the predicted most probable location of an error to allow for modification of the selected character string,” as recited by independent Claim 1.

...

While Williams’s predictive editor program is evolving a match during the inputting of a word, such prediction methodology does not “predict a most probable location of an error within the selected character string,” as is recited in one form or another by the independent claims. As such, there is no way to “position a cursor within the selected character string based on the predicted most probable location of an error to allow for modification of the selected character string” from Williams’s predictive editor. Accordingly, Williams does not disclose or suggest this same feature recited in the independent claims for which the other cited references are admittedly deficient.

Appeal Br. 7–8 (emphases added; quoting Final Act. 4). Given William’s disclosure and our interpretation of the term “location of an error,” Appellant persuades us that the Examiner erred in the application of the teachings of Williams to those of Nordenhake and Huang.

The Examiner has not relied on any of the other cited references to teach this limitation. Consequently, we are persuaded that the Examiner erred in rejecting claim 1, and we do not sustain the obviousness rejection of claim 1.

2. *The Remaining Claims*

As noted above, claims 16 and 30 recite limitations corresponding to the disputed limitations of claim 1, and Appellant challenges the rejection of independent claims 16 and 30 for the same reason as claim 1. Appeal Br. 8; *see* Final Act. 7. Each of claims 2–8, 10–13, 17–29, 32, and 33 depends directly or indirectly from independent claim 1 or 16. *Id.* at 11–16 (Claims App.). Because we are persuaded the Examiner erred with respect to the obviousness rejection of claim 1, we also are persuaded the Examiner erred with respect to the obviousness rejections of claims 16 and 30, as well as to the pending claims dependent therefrom. For this reason, we do not sustain the rejection of those claims.

DECISIONS

1. The Examiner erred in rejecting claims 1–8, 10–13, and 16–33 under 35 U.S.C. § 103 as rendered obvious over the combined teachings of Nordenhake, Huang, and Williams.
2. Thus, on this record, claims 1–8, 10–13, and 16–33 are not unpatentable.

CONCLUSION

For the above reasons, we reverse the Examiner’s decision rejecting claims 1–8, 10–13, and 16–33.

In summary:

Claims Rejected	35 U.S.C. §	References	Affirmed	Reversed
1–8, 10–13, 16–33	103	Nordenhake, Huang, Williams		1–8, 10–13, 16–33
Overall Outcome				1–8, 10–13, 16–33

Appeal 2019-002239
Application 13/567,554

REVERSED