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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte XU CHANG, FU BAO FAN, JUN HUI MA, and JIANDONG YIN

Appeal 2019-003410
Application 15/078,306
Technology Center 2100

Before JEAN R. HOMERE, JAMES B. ARPIN, and STACEY G. WHITE,
Administrative Patent Judges.

ARPIN, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner’s decision rejecting claims 1, 2, 4–8, 10–14, and 16–18, all of the pending claims. Final Act. 2.² Claims 3, 9, and 15 are canceled. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ “Appellant” refers to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party-in-interest as International Business Machines Corporation. Appeal Br. 3.

² In this Decision, we refer to Appellant’s Appeal Brief (“Appeal Br.,” filed December 11, 2018) and Reply Brief (“Reply Br.,” filed March 27, 2019); the Final Office Action (“Final Act.,” mailed July 12, 2018) and the Examiner’s Answer (“Ans.,” mailed February 19, 2019); and the Specification (“Spec.,” filed March 23, 2016). Rather than repeat the Examiner’s findings and Appellant’s contentions in their entirety, we refer to these documents.

STATEMENT OF THE CASE

The recited methods, computer program products, and systems “relate[] generally to the field of graphical user interfaces and, more particularly, to providing user-defined application start pages.” Spec. ¶ 1.

As noted above, claims 1, 2, 4–8, 10–14, and 16–18 are pending. Claims 1, 7, and 13 are independent. Appeal Br. 40–41 (claim 1), 43 (claim 7), 45–46 (claim 13) (Claims App.).

Claim 1 recites, “[a] method for presenting start-pages on a graphical user interface.” *Id.* at 40. Claim 7 recites, “[a] computer program product for presenting start-pages on a graphical user interface, the computer program product comprising: a computer readable storage medium and program instructions stored on the computer readable storage medium, the program instructions” performing functions substantially as recited in claim 1. *Id.* at 43. Claim 13 recites,

[a] computer system for presenting start-pages on a graphical user interface, the computer system comprising: one or more computer processors; one or more computer readable storage media; program instructions stored on the one or more computer readable storage media for execution by at least one of the one or more processors, the program instructions

performing functions substantially as recited in claim 1. *Id.* at 45. Claims 2 and 4–6 depend directly or indirectly from claim 1, claims 8 and 10–12 depend directly or indirectly from claim 7, and claims 14 and 16–18 depend directly or indirectly from claim 13. *Id.* at 40–48.

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

1. A method for presenting start-pages on a graphical user interface, comprising:

in response to executing, by one or more computer processors, logic for selecting user-defined start pages, executing, by one or more computer processors, logic to provide *a graphical user interface (GUI) layer as an overlay on a user interface of a computing device;*

the GUI layer detecting, by one or more computer processors, a selection of a target application from a list of potential target applications, and in response, executing, by one or more computer processors, the target application on the computing device;

the GUI layer identifying, by one or more computer processors, *a sequence of interactions on the user interface that navigate to a page of the target application;* and

the GUI layer detecting, by one or more computer processors, an interaction with a widget of the GUI layer for setting a desired start page, and in response, storing the page of the target application as a user-defined start page for the target application.

Id. at 40–41 (emphases added). Independent claims 7 and 13 include limitations substantially the same as the disputed limitations of claim 1. *Id.* at 43, 45–46.

REFERENCE AND REJECTIONS

The Examiner relies upon the following reference:

Name³	Reference	Publ'd	Filed
Jiang	US 2012/0260202 A1	Oct. 11, 2012	Apr. 11, 2011

The Examiner rejects claims 5, 6, 11, 12, 17, and 18 under 35 U.S.C. § 112(b) as indefinite. Final Act. 2. The Examiner also rejects claims 1, 2,

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

4–8, 10–14, and 16–18 under 35 U.S.C. § 102(a)(1) as anticipated by Jiang.⁴ *Id.* at 4–10.

We review the appealed rejections 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). The Examiner and Appellant focus their findings and contentions on claim 1; so do we. *See, e.g.*, Appeal Br. 28; Ans. 9–10; Reply Br. 5. Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Unless otherwise indicated, we adopt the Examiner’s findings in the Final Office Action and the Answer as our own and add any additional findings of fact for emphasis. We address these rejections below.

ANALYSIS

Indefiniteness

As noted above, the Examiner rejects claims 5, 6, 11, 12, 17, and 18 under 35 U.S.C. § 112(b) as indefinite. Final Act. 2. In particular, the Examiner finds the term “*the* first user interface” in claims 5, 6, 11, 12, 17, and 18 and the term “*the* second user interface” in claims 6, 12, and 18 lack sufficient antecedent basis. *Id.* (emphasis added). Appellant does not contest this rejection and, instead, states, “[r]eview of the rejection of claims 5, 6, 11, 12, 17, and 18 under 35 U.S.C. § 112(b) is not requested at this time.” Appeal Br. 12. Therefore, we summarily affirm the Examiner’s

⁴ In addition, the Examiner rejected claims 1, 2, 4–8, 10–14, and 16–18 as directed to a judicial exception to patent eligibility without significantly more. Final Act. 3–4. The Examiner has withdrawn this patent eligibility rejection. Ans. 9.

indefiniteness rejection of claims 5, 6, 11, 12, 17, and 18. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Anticipation by Jiang

As noted above, The Examiner rejects claims 1, 2, 4–8, 10–14, and 16–18 under 35 U.S.C. § 102(a)(1) as anticipated by Jiang. Final Act. 4–10. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). The elements must be arranged as required by the claim, but this is not an *ipsisimilis verbis* test. *See In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990). Moreover, “it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Preda*, 401 F.2d 825, 826 (CCPA 1968). The Examiner finds Jiang discloses each and every element of claim 1, as well as of claims 7 and 13. Final Act. 4–6, 8, 9.

Appellant contends the Examiner errs for two reasons. *See* Reply Br. 5. For the reasons given below, we are not persuaded by Appellant’s contentions.

First, Appellant contends the Examiner fails to show where Jiang discloses “the GUI layer identifying . . . a sequence of interactions on the user interface of the computing device that navigate to a page of the target application.” Appeal Br. 33–37; *see* Reply Br. 9–14. In particular, Appellant contends, “Jiang does not require that an application (e.g., ‘application 510’ or ‘API 520’) execute any logic to generate a ‘customized entry page’ until *after* a user has already navigated to the desired entry page.

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See Jiang, paragraphs [0025-0028].” Appeal Br. 34. Appellant acknowledges, however, that:

While it is conceivable that user may interact with “application 510” prior to “API 520” creating a “customized entry page” (e.g., to navigate to “sub-pages 412 or 414” from “main page 410”), it is clear that “API 520” would not identify any of these interactions because “API 520” is merely passed a “navigational address” and these interactions would have no bearing on the creation of the “customized entry page” by “API 520.” *See* [Jiang ¶ 28].

Appeal Br. 34. Appellant concludes,

it is clear that the creation of the “customized entry pages” of Jiang is independent of any “sequence of interactions on the user interface of the computing device that navigate to a page of the target application,” as recited in independent claims 1, 7, and 13, because the “navigation address” and any user-selected “parameters” used to create the “customized entry page” are independent of this element of independent claims 1, 7, and 13. *See* Jiang, paragraphs [0025-0028].

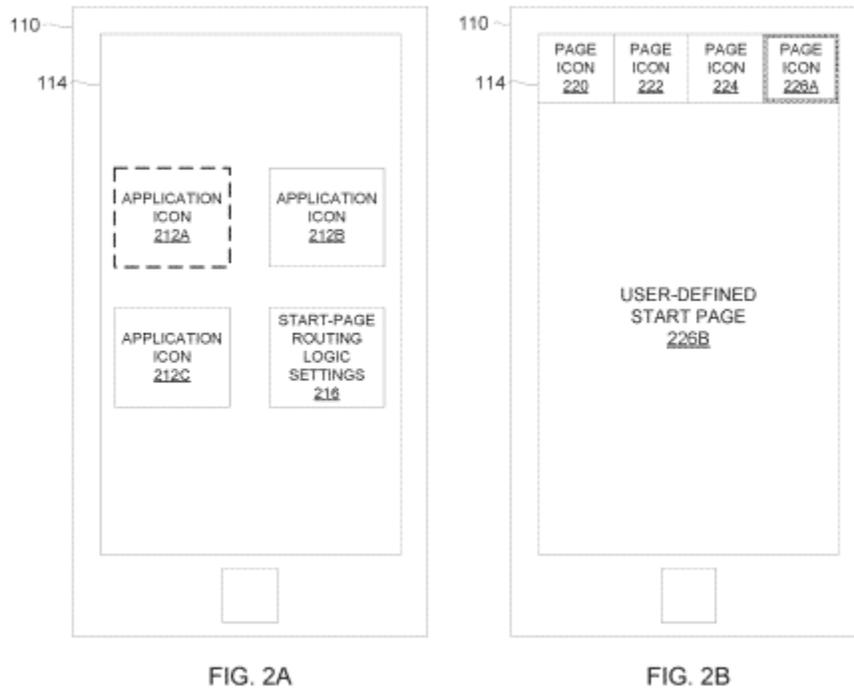
Appeal Br. 35; *see id.* at 36–37 (discussing “parameters”). We disagree.

The Examiner finds the Specification discloses that:

A user of client device 110 can utilize the user interface that is provided by start-page routing logic user interface module 304 to select one of application 112A, application 112B, and application 112C from a list (i.e., a list of potential target applications), proceed to execute the selected application on client device 110, navigate to and/or configure a desired start page for the selected application, and instruct start page routing logic 116 to associate the desired start page with the selected application as the user-defined start page.

Spec. ¶ 25; *see* Ans. 11.

The Specification's Figures 2A and 2B are reproduced below.



Figures 2A and 2B are schematic diagrams of a GUI on a client device.

Spec. ¶ 7. Referring to Figure 2A and 2B, the Specification explains:

When a user of client device 110 selects and activates one of application icon 212A, application icon 212B, and application icon 212C, client user interface 114 causes client device 110 to execute code that corresponds to the selected application to start-up or wake the selected application such that client user interface 114 presents a start page on a screen of client device 110. *The start page can be a default start page of the selected application or a user-defined start page if start-page routing logic 116 is configured for the selected application as described herein.* In Figure 2A, the hash pattern surrounding application icon 212A indicates that a user has selected and activated application icon 212A via client user interface 114. In Figure 2B, client user interface 114 presents user-defined start page 226B and various features of application 112A, as described herein.

Spec. ¶ 21 (emphasis added). Referring to Figure 2B, the user selects icon 226A at the top of the screen and user-defined start page 226B is presented on the screen. *Id.* ¶ 23.

The Specification does not define the term “sequence of interactions,” but explains, “at least three user interactions with client user interface 114 are required to start application 112A and navigate to user-defined start page 226B when the start page is the default start page (i.e., the start page associated with page icon 220).” Spec. ¶ 23. Those interactions appear to be selecting application 112A, activating icon for start-page routing logic settings 216, and defining a user selected start page 226B by interacting with icon 226A. Thus, we understand interaction to refer to any communication or direct involvement by the user with the interface. *See In re Morris*, 127 F.3d 1048, 1053 (Fed. Cir. 1997). Moreover, the disputed limitation refers to “*the* target application,” the “selection” of which is detected in the preceding method step to the step containing the disputed limitation. Appeal Br. 40 (Claims App.) (emphasis added). Consequently, we agree with the Examiner that “the start-page routing logic user interface module 304 according to [the] specification does not instruct start page routing logic 116 to associate the desired start page with the selected application as the user-defined start page until *after* a user has already navigated to the desired start page.” Ans. 11–12 (emphasis added).

Jiang discloses, “[t]he illustrated mobile device 100 can include a controller or processor 110 (e.g., signal processor, microprocessor, ASIC, *or other control and processing logic circuitry*) for performing such tasks as signal coding, data processing, input/output processing, power control, and/or other functions.” Jiang ¶ 19 (emphasis added); *see* Final Act. 5.

Further, Jiang discloses that a user may interact with device 100 using a touchscreen. Jiang ¶¶ 21, 32, 33, Fig. 1 (touchscreen 132).

Jiang discloses:

The entry page is the first page displayed to the user after launching the application. Launching the application means that the application program is activated from the operating system's user interface. By being customizable, the user can customize what content is displayed or what page in the application is the first viewed page. *For example, instead of displaying a default page associated with an application after launching, the user can select sub-pages to be viewed as an entry page.*

Jiang ¶ 25 (emphasis added); *see* Ans. 12. Referring to Figure 1, Jiang explains, “[a]n API 113 can also be used for generating a customized entry page for applications.” Jiang ¶ 19; *see* Final Act. 5. Referring to Figure 3, Jiang explains, “[e]xample entry page information can include *a navigation address* and/or parameters (data) used to customize the entry page. In process block 320, the API updates a local application database. For example, the API can store *the navigation address* and/or parameters in association with an identifier of the application.” Jiang ¶ 26 (emphases added); *see* Final Act. 5; Ans. 12. Further, Jiang explains, “[i]n order to generate a customized entry page into the application 510, the application calls an API 520. The application passes to the API a navigation address and/or parameters. *Typically, the navigation address is determined by receiving user input that assigns a page to an icon.*” Jiang ¶ 28 (emphasis added). Thus, we are persuaded the Examiner shows that Jiang discloses “the GUI layer identifying, by one or more computer processors, *a sequence of interactions* on the user interface that navigate to a page of the target application,” as recited in claim 1, as well as claims 7 and 13. *See* Final Act. 5; Ans. 11–12; *see also* Ans. 12 (citing Jiang, Fig. 4, ¶ 27).

Second, Appellant contends the Examiner fails to show where Jiang discloses “provid[ing] a graphical user interface (GUI) layer as an overlay on a user interface of a computing device.” Appeal Br. 37–38 (alteration in original); *see* Reply Br. 5–7. In particular, Appellant asserts, “[t]he *overlaid* ‘GUI layer’ . . . has specific features and capabilities[, i.e., the first and second ‘detecting’ capabilities and the ‘identifying’ capability,] that any allegedly analogous element taught by Jiang must also have to anticipate independent claims 1, 7, and 13.” Appeal Br. 38. Applicant contends Jiang does not disclose a GUI layer possessing each and every attribute of the recited “GUI layer” of claims 1, 7, and 13. *Id.* We disagree.

The Specification provides only the broadest description of an overlaid GUI layer. Spec. ¶¶ 25, 30. In particular, the Specification explains,

start-page routing logic user interface module 304 can, in some embodiments, *provide a GUI layer (e.g., an overlay on client user interface 114)* that includes a widget (e.g., a button) for setting the desired start page as the user-defined start page and permits a user to interact with a selected program via client user interface 114 as normal.

Id. ¶ 25 (emphasis added).

Jiang's Figure 4 is reproduced below.

FIG. 4

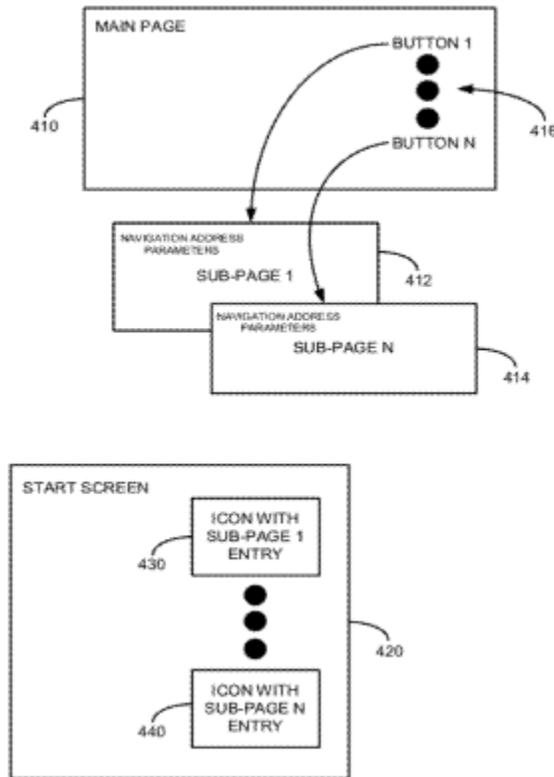


Figure 4 depicts “an example user interface of a third-party application and a view of a default screen on a client device.” Jiang ¶ 14.

The Examiner finds:

As seen in [Jiang's] Fig. 4, “Start screen” 420 is a graphical user interface (GUI) which contains multiple icons 430 and 440 (widget) and allows users to interact with the device thru graphical icons. When an icon is selected, the application launches and displays the corresponding entry page as the first page displayed (see Jiang, para [0027]). Jiang teaches these icons are generated for selecting user-defined starts pages in Fig. 3. The flowchart shows a method for generating an entry page icon on the user interface statically or dynamically when an API is called providing with a navigation address and/or parameters used to customize the entry page. The API stores these information in the local database (see Jiang, page [0026]).

In Fig. 6, Jiang discloses that when an input is received indicating that a user selecting an icon, the application associated with the icon is identified and the address associated with the customized starting page and/or any customization parameters for the application can be retrieved from the database (see Jiang, [para] [0029]).

Ans. 10–11.

Appellant disagrees and contends that Jiang does not disclose that icons 430 and 440 of Figure 4, as well as buttons 416 for sub-pages 412 and 414, are “generated for selecting user-defined start pages,” as recited in claim 1. Reply Br. 6 (emphasis and alteration omitted). Appellant concludes, “[a]ccordingly, it is only true that Jiang’s buttons/icons are ‘generated for selecting user-defined start pages’ in the sense that a user can use the buttons/icons to *select from among pre-defined entry pages*. See Jiang, paragraph [0027].” *Id.*

Nevertheless, Jiang’s Figure 4 depicts main page 410 of a detected, selected application, having buttons 416 (1–N) that cause identified sub-pages 412 and 414 to be displayed. Jiang ¶ 27. Each of sub-pages 1–N has an associated navigation address and parameters. *Id.*, Fig. 4; *see id.* ¶ 27 (“Each sub-page has a navigation address associated therewith.”). As discussed above, these sub-pages may be identified by navigating a sequence of interactions. *See id.* ¶¶ 25–28. Further, Jiang discloses detecting by interaction with a widget, e.g., icons 430 or 440, for setting a user-defined start page. *Id.*, Fig. 4. In particular, Jiang explains:

Icons are typically displayed on the start screen and are used to launch applications. Multiple icons 430 and 440 are shown for illustration and represent that any number of icons (1–N, where N is any number) can be displayed as entry points associated with the sub-pages of the application. *Thus, when an icon is selected,*

the application launches and displays the corresponding entry page as the first page displayed.

Id. ¶ 27 (emphasis added). As discussed above, this customization is accomplished via the API. *See id.* ¶¶ 19, 25, 26, 28. Thus, given the Specification's broad description of an overlaid GUI layer, we are persuaded the Examiner has shown a GUI layer, which performs the capabilities, as recited in claim 1, as well as in claims 7 and 13. *See* Final Act. 5; Ans. 10–11.

We are not persuaded the Examiner errs in determining that the methods recited in claim 1, as well as the computer program products and systems recited in claims 7 and 13, respectively, are anticipated by Jiang. Further, Appellant does not argue dependent claims 2, 4–6, 8, 10–12, 14, and 16–18 separately, and, on this record, we determine that the Examiner has shown that claims 2, 4–6, 8, 10–12, 14, and 16–18 are anticipated by Jiang. *See* Final Act. 6–10; Appeal Br. 39. Consequently, we are not persuaded that the Examiner errs in rejecting claims 1, 2, 4–8, 10–14, and 16–18, and we sustain the anticipation rejection thereof.

DECISION

1. The Examiner does not err in rejecting:
 - a. claims 5, 6, 11, 12, 17, and 18 under 35 U.S.C. § 112(b) as indefinite; and
 - b. claims 1, 2, 4–8, 10–14, and 16–18 under 35 U.S.C. § 102(a)(1) as anticipated by Jiang.
2. Thus, on this record, claims 1, 2, 4–8, 10–14, and 16–18 are not patentable.

CONCLUSION

We affirm the Examiner's rejections of claims 1, 2, 4-8, 10-14, and 16-18.

In summary:

Claims Rejected	35 U.S.C. §	Basis/Reference(s)	Affirmed	Reversed
5, 6, 11, 12, 17, 18	112(b)	Indefiniteness	5, 6, 11, 12, 17, 18	
1, 2, 4-8, 10-14, 16-18	102(a)(1)	Jiang	1, 2, 4-8, 10-14, 16-18	
Overall Outcome			1, 2, 4-8, 10-14, 16-18	

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