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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SERGUEI MANKOVSKII

Appeal 2019-003020
Application 14/643,029
Technology Center 2100

Before JOSEPH L. DIXON, MAHSHID D. SAADAT, and
DONNA M. PRAISS, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–7 and 16–20.² We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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 CA Inc. Appeal Br. 3.

² Claims 12–15 have been allowed and claims 8–11 have been indicated as allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims. Final Act. 2.

STATEMENT OF THE CASE

Introduction

Appellant's disclosure is directed to a website wireframe, which is defined as "a visual guide that represents the skeletal framework of a website or web based service" and "are created for the purpose of arranging elements to best accomplish a particular purpose." Spec. ¶ 1. The disclosed wireframe is created by running a legacy software application and displaying the user interface on a monitor wherein an image of the user interface, including a blocked portion of the content is captured and used to create code describing the user interface. Spec. ¶ 3.

Claims 1–7 are illustrative of the invention and read as follows:

1. A method of creating a wireframe from a display of a user interface of an executing software application, comprising:

blocking a portion of the displayed user interface such that imagery of the blocked portion cannot be captured;

capturing an image of the blocked user interface; and

automatically creating code that reproduces one or more aspects of the displayed user interface from the captured image of the blocked user interface.

2. The method of claim 1, wherein:

the automatically creating code comprises automatically creating HTML code that reproduces one or more aspects of the user interface from the captured image of the blocked user interface.

3. The method of claim 1, wherein:

the capturing an image is performed by a camera; and

the automatically creating code is performed by a computer.

4. The method of claim 1, wherein:
the automatically creating code comprises automatically recognizing a shape in the captured image of the blocked user interface and creating code that reproduces one or more aspects of the blocked user interface element corresponding to the recognized shape.

5. The method of claim 4, wherein:
the automatically creating code further comprises automatically identifying a position of the recognized shape in the blocked user interface, where the created code describes the identified position.

6. The method of claim 1, wherein:
the blocking is performed by configuring an e-ink display overlaid on the displayed user interface.

7. The method of claim 1, wherein:
the blocking is performed by using black-out software to black-out the portion as originally presented within the displayed user interface.

The Examiner's Rejection

Claims 1, 2, 4, 5, 7, and 16–20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohli (US 2012/0166963 A1; pub. June 28, 2012) and Rago (US 2013/0219365 A1; iss. Aug. 22, 2013). *See* Final Act. 2–4.

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohli, Rago, and Grant (US 2015/0121341 A1; pub. Apr. 30, 2015). *See* Final Act. 5.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohli, Rago, and Kiuchi (US 2011/0012294 A1; pub. Jan. 20, 2011). *See* Final Act. 5–6.

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellant's arguments that the Examiner erred. We disagree with Appellant's arguments, and we adopt as our own (1) the pertinent findings and reasons set forth by the Examiner in the Action from which this appeal is taken (Final Act. 2–6; *see also* Ans. 3–6) and (2) the corresponding reasons set forth by the Examiner in the Examiner's Answer in response to Appellant's Appeal Brief (Ans. 7–12). We concur with the applicable conclusions reached by the Examiner and emphasize the following.

CLAIMS 1 and 16

The Examiner finds Kohli discloses the recited method of creating a wireframe from a display of a user interface by capturing an image of the user interface and automatically creating code that represents the displayed user interface from the captured image. Final Act. 3 (citing Kohli Fig. 5, ¶¶ 19, 29–31). The Examiner further relies on Rago as disclosing “blocking a portion of the displayed user interface such that imagery of the blocked portion cannot be captured” and capturing and coding an image of the user interface with respect to the blocked portions. Final Act 3–4 (citing Rago ¶ 31). According to the Examiner, one of ordinary skill in the art would have modified Kohli to include blocking portions of the display, as taught by Rago, in order “to allow a user to blackout areas that are irrelevant, or contain sensitive or confidential information.” Final Act. 4.

First Argument – 35 USC § 132 Declaration

Appellant contends that based on § 2145 of MPEP and a prior decision by the Board (*Ex parte* KARL STUART COLEMAN (PTAB 10/03/2017) Appeal 2016-008548; Application 13/384,881;

nonprecedential), the Examiner erred in refusing to enter and consider the after final rebuttal evidence in the Declaration filed under 35 USC § 132.

Appeal Br. 8–9. Appellant specifically refers to the Declaration and attached exhibits that explain

why “screen capture” does not inherently have one specific meaning and further explains why those of ordinary skill in the art would understand *Kohli* as teaching to obtain GUI structure information at the highest level of abstraction (having lowest informational entropy --at Declaration paragraphs 2g-2h, 5d-5h) which is opposite to pixelated data that would be present if hypothetically obtained “from” that which is displayed. The Declaration also explains why there is no display monitor in *Kohli* Fig. 6. The Examiner position of record does not address any of these points and thus Appellant’s rebuttal evidence and rebuttal arguments remain uncontroverted on record.

Appeal Br. 9. Appellant further refers to evidence in the Declaration including “rebuttal evidence at Response pgs. 13–14 (the W3C specification for a ‘screen capture’) demonstrating that ‘screen capture’ does not inherently capture data of what is actually being ‘displayed’.” See Appeal Br. 9–10.

Based on those portions of the Declaration, Appellant argues the Examiner did not consider the proper construction for claims 1 and 16, or addressed the recited limitations in the rejection as follows:

Claim 16 recites, “. . . code configured to receive imagery captured from a partly blocked user interface of a software application, the partly blocked user interface comprising an originally **displayed** user interface with one or more portions of the originally **displayed** user interface **being selectively blocked** such that imagery of the one or more blocked portions cannot be captured; and . . . code configured to automatically create code describing a derived user interface that is derived from the received imagery captured from **the partly blocked** user interface.”

Claim 1 recites, “creating a wireframe from a display of a user interface” (in the preamble) . . . “blocking a portion of the displayed user interface” . . . “creating code that reproduces one or more aspects of the displayed user interface from the captured image of the blocked user interface” [emphasis added, text skipped]. The only antecedent basis for “the displayed user interface” in the claim body appears in the preamble phrase, “from a display of a user interface”.

Appeal Br. 10, 12.

The Examiner responds that Appellant’s Declaration was filed after the Final Action, before filing the Appel Brief, which was deemed untimely by the Examiner. Ans. 7. Additionally, the Examiner asserts that the refusal to enter such Declaration is a petitionable matter under 37 C.F.R. § 181, rather than reviewable by the Board. *Id.* The Examiner nonetheless evaluated Appellant’s Declaration and provided the following explanation:

Claim 1 uses the term “display” and “displayed.” Claim 1 as recited, does not include a monitor or a computer screen, i.e. a physical hardware component. A user interface ‘display’ of claim 1 may be broadly and reasonably interpreted as merely a software component.

In light of applicant’s own Affidavit, PHOSITA would be uncertain whether the user interface (as recited in claim 1) is actually displayed on a hardware component, such as monitor or a computer screen. Therefore, Claim 1 could be reasonably interpreted to go either way, actual visual representation, or underlying software representation.

Ans. 3.

In the Reply Brief, Appellant refers to a number of disclosed elements: (1) the application Figure 1 that shows camera 108; (2) Abstract stating “the user interface is displayed on a monitor;” (3) paragraph 26 of the Specification describing monitor 104; and (4) paragraphs 3, 21, and 31 of

the Specification that relate to the configuration shown in Figure 1. Reply Br. 2–4. We agree with the Examiner’s claim interpretation that the claimed terms “display” and “displayed” encompass the executed software for displaying content. As stated by the Examiner (*see* Ans. 8–9), claims 1 and 16 do not recite a physical display such as a monitor and merely require the process of displaying or blocking the displayed image, which under the broadest reasonable interpretation could reasonably refer to the process of displaying by the software portion of the user interface.

Appellant’s arguments are not based on the limitations recited in the claims. “During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification.” *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (citing *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004)). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). Furthermore, it is improper, when in giving claims their broadest reasonable interpretation, to read limitations from the specification into the claims. *Phillips*, 415 F.3d at 1323. “There has never been a requirement for an examiner to make an on-the-record claim construction of every term in every rejected claim and to explain every possible difference between the prior art and the claimed invention in order to make out a prima facie rejection.” *In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011).

With respect to Appellant's Declaration, we note that

[t]he Board has broad discretion as to the weight to give to declarations offered in the course of prosecution. *See Velandier v. Garner*, 348 F.3d 1359, 1371 (Fed. Cir. 2003) ('[A]ccord[ing] little weight to broad conclusory statements [in expert testimony before the Board] that it determined were unsupported by corroborating references [was] within the discretion of the trier of fact to give each item of evidence such weight as it feels appropriate.').

In re American Acad. of Science Tech Ctr., 367 F.3d 1359, 1368 (Fed. Cir. 2004). In any case, even upon fully considering the evidence Appellant's arguments refer to, that evidence does not persuade us that the Examiner's claim interpretation is improper.

Second Argument – Combination of Kohli and Rago

Appellant contends, based on the asserted claim interpretation in the submitted Declaration, the proposed modification of Kohli's interface file 128 to include Rago's blocked portions "work to frustrate and render inoperative a fundamental objective of *Kohli* which is to use 'modules' to fully automate the process of converting a desktop application into a web application." Appeal Br. 15. Referring to paragraph 31 of Kohli, Appellant argues the recited automated process requires accessing all the code of the desktop application, which frustrates and renders inoperative the system of Kohli. *Id.*

The Examiner responds by explaining the cited portions of Kohli disclose both a software representation and "[t]he snapshot 208 [which] may include multiple screen captures of the user interface 108 in various visual states." Ans. 8. The Examiner concludes Kohli teaches a hardware component for display or a monitor which provide the user interface elements in a "visual state." *Id.*

We are unpersuaded by Appellant's arguments and find the cited portions in Kohli's paragraphs 29–31 disclose a snapshot analysis module, as well as a code analysis module. More specifically, Kohli discloses “[t]he user interface conversion module 122 may include a code analysis module 202 and/or a snapshots analysis module 204,” which may be used by the user to enter user interface components. Kohli ¶ 29. Snapshot analysis module 208 is further explained as follows:

The snapshots analysis module 204 may be configured to analyze snapshots 208 of the user interface 108. The snapshots 208 may include **multiple screen captures of the user interface 108 in various visual states**. For example, during execution of the desktop application 102, a snapshot tool (not shown) may take the snapshots 208. The snapshots analysis module 204 may perform suitable image analysis of the snapshots 208 in order to determine interface components that make up the user interface 108. For example, **the snapshots analysis module 204 may identify the presence, location, and/or size of various GUI elements within the user interface 108**. The snapshots analysis module 204 may then generate the interface file 128 that specifies the interface components. The snapshots analysis module 204 may also **generate the web interface 114 based on the interface file 128**. In some embodiments, the code analysis module 202 and the snapshots analysis module 204 may be utilized in conjunction in order to generate and/or validate the contents of the interface file 128.

Kohli ¶ 31 (emphases added). Based on the claim interpretation discussed above, Kohli discloses the recited screen capture. As such, modifying Kohli to include the blocking option of Rago would not frustrate or render inoperative the system of Kohli.

Third Argument – Combinability of References

Appellant contends Rago’s “screenshots” are not the same as Kohli’s “screen captures” because Rago’s screenshots are used for reporting a problem to a help desk. Appeal Br. 15–16. Appellant argues that there is no human user reporting a problem in Kohli and therefore, blocking portions of the screen in Rago is not applicable to Kohli’s system. Appeal Br. 17. Appellant further argues that Rago does not include any conversion of the codes or wireframe creation and does not allow user access to the code of the executing program. Appeal Br. 20. According to Appellant, the differences discussed above show that the Examiner has not established a prima facie case of obviousness. Appeal Br. 21.

The Examiner responds by reiterating the stated rationale as “to allow a user to blackout areas that are irrelevant, or contain sensitive or confidential information” and explaining that the noted blocking would have benefitted both references. Ans. 10. The Examiner adds that Kohli’s process, although automated, allows user input in the form of entering interface components using a snapshot analysis module or a snapshot tool. *Id.*; see also Kohli ¶¶ 29, 31. In addition, the Examiner asserts the presented articulated reasoning with some rational underpinning supports the combination of the references that are directed to the field of “taking screen shots, screen captures, or snapshots of what is displayed, and analyzing them.” Ans. 11.

Appellant has not persuaded us of error. We agree with the Examiner (Ans. 10–11) that one of ordinary skill in the art would have recognized that Rago teaches certain features of the recited method of creating a wireframe from a display, such as blocking portions of the display, capturing an image

of the blocked portions that is used in capturing an image and creating the code representing the user interface, which may be included in a system like the method of creating a wireframe from a display by converting the user interface to a web application of Kohli. *See* Kohli ¶¶ 17, 29–31, Abstract; Rago ¶ 31, Abstract; *see also* Final Act. 3–4. As also explained by the Examiner, both references relate to capturing and analyzing what is displayed on a user interface and creating the code to reproduce certain aspect of the image. Ans. 11. Therefore, the blocking feature of Rago, when considered together with the disclosure of the snapshot analysis of Kohli, would have suggested the recited features of claims 1 and 16.

Additionally, the Supreme Court made clear that when considering obviousness, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Furthermore, the skilled artisan is “a person of ordinary creativity, not an automaton,” and this is a case in which the skilled artisan would “be able to fit the teachings of multiple patents together like pieces of a puzzle.” *KSR*, 550 U.S. at 421. We therefore find the Examiner provided a sufficiently reasonable motivation for one of ordinary skill in the art to combine Kohli and Rago based on the above discussed improvements to Kohli’s system as modified by Rago in rejecting claims 1 and 16.

CLAIMS 2–7

Appellant contends “creating HTML code,” as recited in claim 2, is not taught or suggested by Kohli’s paragraph 23 because the reference implies “code of the desktop application is fully accessible so that the

‘modules’ can analyze the code, ‘deconstruct’ it and automatically produce the XML file for the web application user interface.” Appeal Br. 22.

Regarding claims 4, 5, and 7, Appellant argues that the Examiner erred because Kohli’s paragraph 31 “does not inherently teach or suggest anything about capturing of a blocked and displayed user interface.” Appeal Br. 22–23.

The Examiner responds that “[t]he term ‘creating’ does not necessarily imply that the HTML code was not present” whereas “[c]reation of HTML code could be done in order to overwrite the code that’s already present.” Ans. 11. In response to Appellant’s assertion that Kohli does not teach or suggest “capturing of a blocked and displayed user interface” (Appeal Br. 22), the Examiner explains that the disclosure of “the snapshots analysis module 204 may identify the presence, location, and/or size of various GUI elements within the user interface” in paragraph 31 of Kohli meets the disputed limitations because Appellant’s claims do not require “that the blocked user interface is actually displayed.” *Id.* Regarding claims 4, 5, 7, the Examiner refers to Kohli’s disclosure in paragraph 31 regarding the snapshot analysis module and how it identifies different elements of the user interface and to Rago’s paragraph 31 regarding the user ability to highlight or black out certain information in the workspace. Ans. 12.

We are unpersuaded by Appellant’s arguments. As explained by the Examiner (Ans. 11), the claims recite “captured image of the blocked user interface,” which is not the same as “capturing of a blocked and displayed user interface,” as asserted by Appellant. That is, the snapshot analysis of Kohli captures the *image* of the desktop including blacked out or blocked portions, as modified by Rago. Additionally, we observe that one of

ordinary skill in the art would have understood that HTML code could be produced to represent the captured image of the blocked user interface although the captured image of the unblocked user interface is also produced in HTML code.

CLAIM 3

Appellant contends adding Grant’s teachings to the Kohli-Rago combination does not remedy the above-discussed deficiency. Appeal Br. 23. According to Appellant, “[t]he purpose of Grant is to have the full screenshot associated with its corresponding source code (while in the process of developing the application using the ‘development’ application” or taking a screenshot by a camera, which is unrelated to Kohli and Rago. Appeal Br. 23–24. Appellant further argues “[t]he purpose of Grant would be frustrated if the camera captured a blocked version of a displayed screen.” Appeal Br. 24.

We are unpersuaded. As explained by the Examiner, “the purpose of Grant is to facilitate searching of source code, having blocking means may further aid in this purpose by focusing on portions of the interface that are relevant to the source code.” Ans. 12. Additionally, we note that Grant teaches that a screenshot may be generated both “from source code and/or from display data that is output from and/or generated by the data processing system” or “by a camera taking a picture of an image on a visual output device and providing the screenshot to a data processing system.” Grant ¶ 16. That is, an image captured by a camera may include Kohli’s image of the displayed user interface with Rago’s blacked out portions, which is used to create code that represents certain aspects of the user interface.

CLAIM 6

Appellant contends the Examiner failed to provide a rationale “for why artisans involved in the disparate endeavors of *Kohli* (fully automated code conversion) and *Rago* (reporting problems to a help desk) would further look to the far a flung endeavor of *Kiuchi* (forming a pattern in a plurality of areas of a surface of an elongated sheet material through a scanning exposure -- ¶ [0003]).” Appeal Br. 24–25.

We are unpersuaded that the Examiner erred. First, we observe that claim 6 does not require using a camera to capture an image of the blocked user interface. Second, *Kiuchi* discloses an electronic paper or an electronic ink to form masked patterns on a display and, as stated by the Examiner (Final Act. 5–6), the proposed combination would “provide a user with a means for taking masking screenshots that is independent of the system displaying the screen.” *See Kiuchi* ¶ 247.

Therefore, we agree with the Examiner’s findings and conclusion with respect to combinability because all of the features of *Kiuchi* need not be bodily incorporated into the *Kohli-Rago* combination. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981); *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the artisan is not compelled to blindly follow the teaching of one prior art reference over the other without the exercise of independent judgment. *See Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984). Appellant did not rebut the Examiner’s findings in the Reply Brief.

CONCLUSION

Accordingly, we sustain the Examiner’s obviousness rejection of independent claims 1 and 16, dependent claims 2–7, 3, and 6, as well as the

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remaining claims, which are not separately argued by Appellant. *See* Appeal Br. 21–25.

DECISION SUMMARY

In summary:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 2, 4, 5, 7, 16–20	103	Kohli, Rago	1, 2, 4, 5, 7, 16–20	
3	103	Kohli, Rago, Grant	3	
6	103	Kohli, Rago, Kiuchi	6	
Overall Outcome			1–7, 16–20	

FINALITY AND 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