



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.
14/331,908	07/15/2014	Derek J. Daw	297-PDD-10-118 US DIV	8178
96000	7590	09/02/2020	EXAMINER	
AUST IP LAW Ronald K. Aust 12029 E. WASHINGTON STREET INDIANAPOLIS, IN 46229			DOUGHERTY, SEAN PATRICK	
			ART UNIT	PAPER NUMBER
			3791	
			NOTIFICATION DATE	DELIVERY MODE
			09/02/2020	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):

ip.docket@bd.com
raust@austiplaw.com
tshort@austiplaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DEREK J. DAW, FRANK R. LOUW, PAUL LUBOCK,
RICHARD L. QUICK, and MARTIN V. SHABAZ

Appeal 2019-003198
Application 14/331,908
Technology Center 3700

Before DANIEL S. SONG, MICHELLE R. OSINSKI, and
BRANDON J. WARNER, *Administrative Patent Judges*.

SONG, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 28–31, 42, 44, 45, and 48. 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 parties in interest as SenoRx, Inc., C.R. Bard, Inc., and Becton, Dickinson and Company. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The claims are directed to a graphical user interface for a tissue biopsy system. Claim 28, reproduced below, is illustrative of the claimed subject matter:

28. A screen providing a graphical user interface (GUI) for a tissue biopsy system having a tissue cutting member adapted for cutting one or more tissue specimens from tissue at a target site within a patient, the screen having the graphical user interface comprising:

a. a first GUI area configured to represent a first region of the target site from which at least one tissue specimen has been separated from tissue at the target site by the tissue cutting member;

b. a second GUI area, visually distinguishable from the first GUI area, configured to represent a second region from which the tissue cutting member may separate one or more additional tissue specimens from tissue at the target site; and

c. a third GUI area, visually distinguishable from the first and second GUI areas, configured to represent a third region in which the tissue cutting member is deployed to separate a tissue specimen from tissue at the target site.

Appeal Br. 49, Claims App.

REJECTIONS

1. Claims 28–31, 42, 44, 45, and 48 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Final Act. 2.

2. Claims 28–31, 42, 44, 45, and 48 are rejected as being directed to patent ineligible subject matter under a judicial exception to 35 U.S.C. § 101. Final Act. 3.

3. Claims 28, 29, 42, and 48 are rejected under 35 U.S.C. § 102(b) as anticipated by Burke (US 6,351,660 B1, issued Feb. 26, 2002). Final Act.

6.

4. Claims 30, 31, 44, and 45 are rejected under 35 U.S.C. § 103(a) as unpatentable over Burke. Final Act. 10.

OPINION

Rejection 1: Non-Statutory Subject Matter

The Examiner rejects claims 28–31, 42, 44, 45, and 48 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Final Act. 2. In particular, the Examiner determines that the claims “do not fall within at least one of the four categories of patent eligible subject matter because the claims are drawn to a mere arrangement of printed matter,” and that “there is no functional relationship between the tissue cutting member and the GUI areas.” Final Act. 2, citing *In re Miller*, 418 F.2d 1392, 1396 (CCPA 1969).

We do not sustain this rejection. Independent claim 28 and claims depending therefrom, as well as independent claim 48, all recite “[a] screen providing a graphical user interface (GUI)” comprising first, second, and third GUI areas. Appeal Br. 49, 50–51, Claims App. Independent claim 42 and claims depending therefrom recite “[a] tissue biopsy system having a tissue cutting member and a screen having a graphical user interface (GUI)” comprising first, second, and third GUI areas. Appeal Br. 49–50, Claims App.

The Examiner does not adequately explain why a screen comprising GUI areas and a tissue biopsy system are not “machine[s], [or] manufacture” under 35 U.S.C. § 101. Although the Examiner and the Appellant disagree as to whether the claims recite printed matter (Final Act. 11, 13; Appeal Br. 16, 19; Ans. 16; Reply Br. 10–11), we do not view mere inclusion of recitations directed to printed matter to be dispositive as to whether or not

the claims satisfy 35 U.S.C. § 101. *Cf. In re Miller*, 418 F.2d at 1396 (“The fact that printed matter by itself is not patentable subject matter, because non-statutory, is no reason for ignoring it when the claim is directed to a combination.”). We agree with the Appellant that the claims are “directed to a statutory category of invention, i.e., machine and manufacture, and should not be considered mere printed matter.” Appeal Br. 23.

Accordingly, we reverse this rejection based on the determination of non-statutory subject matter under 35 U.S.C. § 101.

Rejection 2: Patent Ineligible

The Examiner also rejects claims 28–31, 42, 44, 45, and 48 as being directed to patent ineligible subject matter under the judicial exception to 35 U.S.C. § 101, determining that the claims are directed to “an abstract idea.” Final Act. 3. In that regard, the Examiner also determines that the claims do not “recite ‘additional elements’ either alone or in combination that amount to significantly more” than the abstract idea, and that the additional elements are not “tied to a particular machine or apparatus, or transform a particular article to a different state or thing.” Final Act. 5. Thus, the Examiner determines that “[r]ather than being a particular limited application of the abstract idea which serves to improve a specific method or device, the claim would tend to monopolize the abstract idea itself in practice.” Final Act. 5. We agree with the Examiner’s conclusion that the claims are patent ineligible, and address the Appellant’s arguments *infra*.

The Supreme Court has set forth “a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*

Corp. v. CLS Bank Int'l, 573 U.S. 208, 217 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)). According to the Supreme Court’s framework, we must first determine whether the claims at issue are directed to one of those concepts. *Id.*

If so, we must secondly “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* at 221 (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The PTO published revised guidance on the application of Section 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“*Guidance*”). The *Guidance* provides that in conducting Step One analysis of the *Alice* framework, we first look to whether the claim recites:

- Prong 1: any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity, or mental processes); and
- Prong 2: additional elements that integrate the judicial exception into a practical application.

In other words, under Prong 1, we look to whether the claim recites an abstract idea. If the claim recites an abstract idea, we look under Prong 2 at the claim, as a whole, and determine whether the claim is directed to the

abstract idea or, instead, is directed to a “practical application” of the abstract idea.

Only if a claim recites a judicial exception and does not integrate that exception into a practical application, do we then look to Step Two under the *Alice* framework to determine whether the claim adds a specific limitation individually or as an ordered combination, beyond the judicial exception that is not “well-understood, routine, conventional” in the field, or simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. *See Guidance*.

Alice Step One, Guidance Step 2A, Prong 1

The Examiner determines that the claims are directed to an “abstract idea” because they recite “three distinguishable GUI areas, all ‘configured to’ represent various manipulations with the tissue cutting member.” Final Act. 3–4. We generally agree with the Examiner that the claims at issue recite an abstract idea because the recitations of GUI areas being configured to represent regions of a target site in independent claims 28 and 42, and recitations of GUI areas representing regions of a target site in independent claim 48, recite a mental process, which can be performed in the human mind or manually. In particular, certain claims that recite collecting and analyzing information may be treated as mental processes within the abstract idea category. *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016). Moreover, the court has held,

The focus of the asserted claims . . . is on collecting information, analyzing it, and displaying certain results of the collection and analysis. . . . [W]e have treated analyzing

information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.

Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1353–54 (Fed. Cir. 2016).

In this regard, the *Guidance* provides the following instruction:

If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind.

Guidance, 84 Fed. Reg. at 52 n.14; *see also Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) (“[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.”).

The Appellant argues that claim 28, for example, “is directed to a screen and GUI with three GUI areas to provide data regarding the tissue cutting member in relation to the target site **that surgeons are incapable of doing on their own during an operation**” (Appeal Br. 20), and allows for visualization of the part of the tissue that has been cut from the target site, may be cut from the target site, and the current angular position of the tissue cutting member, which helps a surgeon to better understand the progress of a biopsy operation (Appeal Br. 19, citing Spec. ¶ 74). The Appellant argues that the claim 28 “does not recite a mental process because . . . under its broadest reasonable interpretation, does not cover performance in the mind” (Reply Br. 10), but instead, “is very much directed to a tangible device providing data to the user of a tissue biopsy system that cannot be perceived

by the user of the tissue biopsy system without the aid of the screen providing a graphical user interface (GUI).” Reply Br. 9. Similar arguments are relied upon in support of eligibility of independent claims 42 and 48. Appeal Br. 24–26, 28–29.

However, it is not apparent why a surgeon, during the course of a biopsy operation, cannot keep track of the orientation of a tissue cutting member as it is used via pen and paper, so as to record representations of what portion of the target site has had a tissue removed, what portion of the target site may have tissue removed, and what area of the target site a tissue cutting member is deployed based on its position and orientation. In that regard, the claims recite that the various GUI areas merely *represent* various regions of the target site, and are not necessarily even actual images of the target site, which a surgeon would not be able to obtain mentally or manually. Moreover, although the claims recite a screen and a tissue cutting member, these devices are recited generically, without any technical specificity. *Guidance*.

Therefore, under Prong 1, independent claim 28, as well as independent claims 42 and 48, which include substantially the same limitations, recite the steps of graphically representing various regions of a target site, which can be performed mentally, or manually using pen and paper, and thus fall within the mental process category of abstract ideas.

Alice Step One, Guidance Step 2A, Prong 2

Under Prong 2 of the *Guidance*, we do not assume that claims reciting an abstract idea are directed to patent ineligible subject matter because “[a]t some level, ‘all inventions . . . embody, use, reflect, rest upon, or apply laws

of nature, natural phenomena, or abstract ideas.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (alteration in original) quoting *Alice* (quoting *Mayo*). Instead, “the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). If the claims are not directed to an abstract idea, the inquiry ends. *Guidance*. If the claims are “directed to” an abstract idea, then the inquiry proceeds to the second step of the *Alice* framework. *Id.*

The *Guidance* instructs that the “directed to” issue is to be analyzed as to whether the claims include additional elements that integrate the judicial exception into a practical application. A claim that integrates a judicial exception into a practical application will apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception beyond generally linking the use of the judicial exception to a particular technological environment or field of use, such that the claim is more than a drafting effort designed to monopolize the judicial exception. *Guidance*.

As to claim 28, except for the screen that provides a graphical user interface in the preamble, the claim does not positively recite other structure. In particular, the claim recites “[a] screen providing a graphical user interface (GUI) *for* a tissue biopsy system having a tissue cutting member adapted *for* cutting one or more tissue specimens.” Appeal Br. 49, Claims App. (emphasis added); *see also* Ans. 16 (“the tissue cutting member and the biopsy operation are not positively claimed.”). Thus, the tissue biopsy

system with its tissue cutting member is passively recited as intended use. The recited additional elements of first, second, and third GUI areas are individually recited to be “configured to represent” the regions of the target site from which tissue specimen has been separated, may be separated, or in which the tissue cutting member is deployed. Thus, each of these additional elements (first, second, and third GUI areas) individually recite the concept of representing the various regions of the target site. Although claim 28 recites regions of the target site in the context of the tissue cutting member, as noted above, the tissue cutting member is passively recited to establish the technological environment or field in which the invention is to be used. The language of claim 28 is clear that subject of these additional elements are the representations of the various regions of the target site, and not the tissue cutting member itself, such that these additional elements are not integrated into the tissue cutting member (or to the screen) in any meaningful manner. Considering claim 28 in its entirety, its character as a whole is directed to an excluded subject matter, and does not apply, rely on, or use the concept of representing various regions of the target site in a manner so as to integrate the same into the passively recited tissue cutting member, or to the screen.

Independent claim 42 recites “[a] tissue biopsy system having a tissue cutting member and a screen having a graphical user interface (GUI),” and further recites the screen and the tissue cutting member in the body of the claim so that these elements are positively recited. Appeal Br. 49–50, Claims App. However, the additional elements recited in claim 42 are substantially the same as those of claim 28, again reciting first, second, and third GUI areas that are “configured to represent” the regions of the target site. Although the tissue cutting member is positively recited, it is clear

from the claim language that the subject of these additional elements are the representations of various regions of the target site, and not the recited screen or the tissue cutting member. Thus, claim 42 also does not apply, rely on, or use the concept of representing various regions of the target site in a manner so as to integrate the same into the claimed screen or the tissue cutting member, and its character, as a whole, is directed to an excluded subject matter.

Independent claim 48 has a preamble that is substantially similar to claim 28 but recites that the GUI comprises “a plurality of contiguous GUI areas that dynamically change during a biopsy procedure.” Appeal Br. 50–51, Claims App. Claim 48 also recites that the first GUI area “represents a first region of the target site, the first region being cumulative of all tissue specimens that have been separated from tissue at the target site by the tissue cutting member.” Appeal Br. 50–51, Claims App. Accordingly, the additional language notwithstanding, like claim 28, each of the additional elements (first, second, and third GUI areas) again individually recite the concept of representing the various regions of the target site. Although claim 48 recites that the GUI areas are dynamically changed during a biopsy procedure, such changing representation of GUI areas is nonetheless abstract and can be performed in the mind or manually, and the claim does not recite how such dynamic change is implemented so as to be integrated into the screen or the passively recited tissue cutting member. Same can be said of the limitation that the first region is cumulative of all tissue specimens that have been separated from tissue at the target site. Thus, claim 48 also does not apply, rely on, or use the concept of representing various regions of the target site in a manner so as to integrate the same into the claimed screen or

the tissue cutting member, and its character, as a whole, is directed to an excluded subject matter.

The Appellant argues that in the invention of claim 28, “the screen provid[es] a graphical user interface [that] is inextricably tied to the field of medicine, particularly biopsy procedures, and is tied to a tissue cutting member” (Appeal Br. 23), and that “each of the three GUI areas is functionally tied to the tissue, the tissue cutting member, and the biopsy operation, even though the tissue cutting member is not positively recited in claim 28” (Reply Br. 13; *see also* Reply Br. 10–11). The Appellant relies on similar arguments in support of eligibility of independent claims 42 and 48. Appeal Br. 24–26, 28–29. However, the claims merely generally link the use of the judicial exception to a particular technological environment or field of use, which is insufficient to establish integration into a practical application.

The Appellant argues that the claimed invention “requires a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface’s structure that is addressed to and resolves a specifically identified problem in the prior state of art.” Appeal Br. 20. In that regard, the Appellant argues that the claimed invention is like that of *Data Engine Techs. LLC v. Google LLC*, wherein the Federal Circuit stated, “‘a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface’s structure that is addressed to and resolves a specifically identified problem in the prior state of the art’ . . . were not abstract under *Alice* step one.” Reply Br. 10, quoting *Data Engine*, 906 F.3d 999, 1009–1010 (Fed. Cir. 2018).

However, *Data Engine* is distinguishable because the claims determined to be not abstract therein were directed to “systems and methods for making complex electronic spreadsheets more accessible by providing familiar, user-friendly interface objects—specifically, notebook tabs—to navigate through spreadsheets while circumventing the arduous process of searching for, memorizing, and entering complex commands.” *Data Engine*, 906 F.3d at 1002. In that regard, *Data Engine* also took into consideration substantial evidence indicating the problem confronted by users of conventional spreadsheets, and the industry acclaim directed to the solution provided by the commercial implementation of the claimed invention. *Data Engine*, 906 F.3d at 1004.

In contrast, in the present appeal, the claimed invention does not involve the level of complexity addressed by the invention in *Data Engine*, does not involve circumvention of “arduous process of searching for, memorizing, and entering complex commands,” and is not specific as to the interface claimed as in *Data Engine*. *Id.* at 1002. To the contrary, the claimed invention is directed to “providing” three GUI areas that “represent” various regions of a target site, which as discussed above, can be performed in the mind or manually. In addition, the present record lacks the substantial evidence clearly establishing the problem and industry praise that were present in *Data Engine*. Accordingly, *Data Engine* is distinguishable and the Appellant’s reliance thereon is not persuasive.

Therefore, in view of the above considerations, we agree with the Examiner that the claims recite an abstract idea, and do not incorporate the same into a practical application. We also agree with the Examiner’s assessment that “[r]ather than being a particular limited application of the

abstract idea which serves to improve a specific method or device, the claim would tend to monopolize the abstract idea itself in practice.” Final Act. 5. Accordingly, we proceed to the analysis under *Alice*, Step Two.

Alice Step Two, Guidance Step 2B

In accordance with *Alice*, we next “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217. According to the Examiner, the claims do not “recite ‘additional elements’ either alone or in combination that amount to significantly more,” and that the additional elements are not “tied to a particular machine or apparatus, or transform a particular article to a different state or thing.” Final Act. 5. We agree with the Examiner.

The individual elements of the claims on appeal do not transform the nature of the claim. As discussed above, each of the additional elements (first, second, and third GUI areas) individually recite the concept of representing the various regions of the target site. The screen is generically recited in the claims as simply providing or having a GUI. The tissue cutting member, even when positively recited, is generically recited and merely establishes the technological environment or field in which the invention is to be used, and to place the recited regions of the target site in context to the biopsy procedure. Mere generic recitations to a screen, or a tissue cutting member and a screen, are insufficient to transform the nature of the claims. As noted above, “merely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible

invention.” *Alice*, 573 U.S. at 221. In that regard, the Specification discloses that the screen “can be provided by any type of displays, such as liquid crystal displays (LCD’s), cathode ray tube (CRT) monitors and plasma displays.” Spec. ¶ 48. In addition, although the Specification discloses a detailed embodiment of a tissue cutting member, none of its features are recited in the claims, whether the tissue cutting member is passively recited or positively recited. Furthermore, consideration of the elements of the claims in their ordered combination does not change the outcome in that these elements are just repeated in the same way in each of the limitations.

The Appellant argues that in claim 28, “the screen provid[es] a graphical user interface [that] is inextricably tied to the field of medicine, particularly biopsy procedures, and is tied to a tissue cutting member that in combination provides *significantly more* than any abstract ideas the claims may involve.” Appeal Br. 22–23. Similar arguments are relied upon in support of eligibility of independent claims 42 and 48. Appeal Br. 24–26, 28–29. According to the Appellant, the claims are “not merely directed to displaying information on a graphical user interface, but rather requires a specific, structured graphical user interface that requires at least three GUI areas, each specific GUI area is paired with a prescribed functionality directly related to the tissue biopsy system and tissue cutting member.” Reply Br. 10.

However, the claims do not recite, nor does the Appellant adequately explain, how such generic recitation of a screen with a GUI and a tissue cutting member transforms the nature of the claims into a patent-eligible application. Nothing in the claims impact the technical operation of the

screen or the tissue cutting member. As the Examiner notes, “displaying different areas that are visually distinguishable” is “well-understood, routine and conventional.” Ans. 15.

Therefore, in view of the above considerations, we agree with the Examiner’s determination that the elements of the claims, both individually and as an ordered combination, fail to transform the nature of the claims into a patent-eligible application. Accordingly, we affirm the Examiner’s rejection of claims 28–31, 42, 44, 45, and 48 as being directed to patent ineligible subject matter under the judicial exception to 35 U.S.C. § 101. The remaining argument between the Examiner and the Appellant as to whether the claims require simultaneous display of the various GUI areas (Appeal Br. 21; Ans. 16; Reply Br. 11) is determined to be peripheral because, even if the Appellant was correct in its asserted claim interpretation, this does not alter the analysis under *Alice* set forth above.

Rejection 3: Anticipation

The Examiner rejects claims 28, 29, 42, and 48 as anticipated by Burke, finding that Burke discloses the recited first, second, and third GUI areas. Final Act. 6. The Examiner interprets the claim limitations reciting “GUI area configured to represent” (claims 28 and 42) and “GUI area that represents” (claim 48) as “functional language, meaning this area need only be ‘configured to represent’ the limitations which follow.” *See, e.g.*, Final Act. 6. For example, as to the first area, the Examiner determines that “all that is required to meet the claimed limitation is a first color or first pattern, since this first color or first pattern is capable of being *configured to represent* the first region – the claim fails to expressly disclose *how* the

area is displayed, *where* the area is displayed, *when* the area is displayed, etc.” Final Act. 6, emphasis added. Similar findings are set forth relative to the second and third GUI areas recited in the claims. Final Act. 6–8.

Accordingly, the Examiner finds that Burke discloses a display having a first GUI area in which “needle biopsied tissue can be highlighted in pink,” a second GUI area “shown in grey scale, as the practitioner handling the needle *may* separate tissue by rotation of needle,” and a third GUI area where “image information which is present in the post-biopsy but not previously can be highlighted in a different color, as the needle is *capable* of being deployed to this region to separate a tissue specimen.” Final Act. 6–7, citing Burke, col. 5, ll. 27–31, 33–37; *see also* Ans. 22.

The Appellant disagrees and argues, *inter alia*, that “using the phrase ‘configured to’ in an apparatus claim limits the claimed structural element to be inherently capable of the function without further modification.” Appeal Br. 32, 38, 40. In that regard, the Appellant argues that the claimed screen “displays at least ‘a. a first GUI area . . . b. a second GUI area . . . and c. a third GUI area’ all at the same time and all on the same screen,” which is not disclosed by Burke. Appeal Br. 32.

The Examiner responds that the Appellant’s arguments are not commensurate in scope with the claim language because:

the claims do not set forth that the first, second and third GUI areas are actually displayed, shown or otherwise represented on or within the screen that has the graphical user interface. . . .

The limitation “comprises” does not necessarily impart that the first, second and third GUI areas are displayed on the screen all at the same time and all on the same screen.

Ans. 20.

We generally agree with the Appellant. Regardless of whether the first, second, and third GUI areas are actually or simultaneously displayed, the claimed GUI is recited to comprise the first, second, and third GUI areas (independent claims 28 and 42), or that the GUI includes the GUI areas (independent claim 48). Thus, we generally agree with the Appellant that the claims require the three GUI areas. Reply Br. 16. “‘Functional’ terminology may render a claim quite broad . . . [;] a claim employing such language covers any and all embodiments which perform the recited function.” *In re Swinehart*, 439 F.2d 210, 213, (CCPA 1971). However, we do not agree with the Examiner’s position that a color or pattern being *capable of being configured* to represent a region satisfies the recited limitations. Specifically, the recitation of the phrase “configured to” in independent claims 28 and 42 requires more than a third GUI area with “mere capability” for representing the region of the target site. Rather, in our understanding of these claims, that term is synonymous with “made to” and “designed to.” *In re Giannelli*, 739 F.3d 1375, 1379–80 (Fed. Cir. 2014). In addition, claim 48 recites that the third GUI area represents the recited region of the target site, thus requiring actual representation.

As such, at a minimum, Burke fails to disclose a third GUI area “configured to represent a third region in which the tissue cutting member is deployed to separate a tissue specimen from tissue at the target site” as required by independent claims 28 and 42. In addition, Burke fails to disclose a third GUI area “that represents a third region in which the tissue cutting member is deployed to separate a next tissue specimen from tissue at the target site.” Appeal Br. 51, Claims App.

The Examiner does not direct us to where Burke discloses a third GUI area configured in the manner recited by claims 28 and 42, or represents the third region as recited. The Examiner's position that the "different color" taught by Burke (i.e., third color or third pattern) "is capable of being configured to represent the third region" is not sufficient to sustain the anticipation rejection of the claims. Thus, we find persuasive the Appellant's argument that "the Burke composite image does not include a third GUI area that represents where the tissue cutting member 'is deployed' within the tissue, i.e., [the present location of the tissue cutting member in the tissue]." Appeal Br. 35.

Accordingly, we reverse this anticipation rejection. Further arguments of the Appellant regarding the shapes of the graphical user interfaces (Appeal Br. 32), that Burke's image is a "composite image" generated after the biopsy procedure (Appeal Br. 34–35; Reply Br. 16–17), and that Burke's image is an actual image rather than a graphical representation (Appeal Br. 36), are moot. In addition, the Appellant's arguments specifically directed to dependent claim 29 (Appeal Br. 37; Reply Br. 19); independent claim 42 (Appeal Br. 37–39); and independent claim 48 (Appeal Br. 39–41; Reply Br. 18), are moot. Furthermore, the tangential claim interpretation issues pertaining to the terms "screen" (Appeal Br. 15–16; Reply Br. 7; Ans. 11–12) and the "tissue cutting member" (Appeal Br. 16; Reply Br. 8; Ans. 13), are also moot.

Rejection 4: Obviousness

The Examiner rejects claims 30, 31, 44, and 45 as unpatentable over Burke. Final Act. 10. The Examiner rejects these claims, concluding that

the recited shapes of the GUI areas “would have been one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a display[] in various shape formats and configurations.” Final Act. 11, citing Burke, col. 9, ll. 41–57.

However, this obviousness rejection is premised on the erroneous claim interpretation and findings pertaining to Burke discussed above relative to Rejection 3. Accordingly, we reverse this rejection of claims 30, 31, 44, and 45 as well. The Appellant’s arguments specifically directed to these claims (Appeal Br. 44–47; Reply Br. 19–20) are moot.

CONCLUSION

The Examiner’s rejection of claims 28–31, 42, 44, 45, and 48 is affirmed. More specifically,

1. The rejection of claims 28–31, 42, 44, 45, and 48 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is reversed.
2. The rejection of claims 28–31, 42, 44, 45, and 48 as being directed to patent ineligible subject matter under a judicial exception to 35 U.S.C. § 101 is affirmed.
3. The rejection of claims 28, 29, 42, and 48 as anticipated by Burke is reversed.
4. The rejection of claims 30, 31, 44, and 45 as unpatentable over Burke is reversed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
28–31, 42, 44, 45, 48	101	Utility		28–31, 42, 44, 45, 48
28–31, 42, 44, 45, 48	101	Eligibility	28–31, 42, 44, 45, 48	
28, 29, 42, 48	102	Burke		28, 29, 42, 48
30, 31, 44 45	103	Burke		30, 31, 44 45
Overall Outcome			28–31, 42, 44, 45, 48	

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