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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* JOHANNES OSTERHOFF and HANS-PETER SCHAERGES

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Appeal 2018-005654  
Application 14/706,754<sup>1</sup>  
Technology Center 2100

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Before TERRENCE W. McMILLIN, KARA L. SZPONDOWSKI, and  
SCOTT B. HOWARD, *Administrative Patent Judges*.

HOWARD, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–20, which constitute all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

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<sup>1</sup> Appellants identify SAP SE as the real party in interest. App. Br. 2.

## THE INVENTION

The disclosed and claimed invention is directed to “software development and software development management,” and more particularly to “a system and method for pattern recognition of software program code in an integrated software development environment.” Spec.

¶ 1.<sup>2</sup>

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A system comprising:

a computer processor configured to:

receive an input string from a user;

search for the input string in a plurality of program code files in an integrated software development environment (IDE);

display a result on a viewport of a display unit, the result comprising miniature views of the program code files, wherein the result on the viewport of the display unit comprises equally-sized tiles, or the result on the viewport of the display unit comprises a set of closely-packed blocks with a varying compression rate applied to the closely-packed blocks, such that the closely-packed blocks permit a fitting of a large amount of program code files on the viewport of the display unit;

display the set of closely-packed blocks by placing an initial block at the center of the viewport of the display unit;

place a subsequent block to the left, right, below, or above the initial block, such that the subsequent block is placed a least distance from the center of the viewport of the display unit;

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<sup>2</sup> We refer to the Specification filed May 7, 2015 (“Spec.”); Final Office Action mailed Nov. 2, 2017 (“Final Act.”); Appeal Brief filed Jan. 16, 2018 (“App. Br.”); Examiner’s Answer mailed Apr. 9, 2018 (“Ans.”); and the Reply Brief filed May 10, 2018 (“Reply Br.”).

iteratively place a plurality of subsequent blocks such that each subsequent block is placed at the least distance from the center of the viewport of the display unit and such that each subsequent block does not overlap any other previously placed block;

apply an increasing compression rate to the set of closely-packed blocks as the distance from the center of the viewport of the display unit increases; and

move the display of the closely-packed blocks about the center of the viewport of the display unit, thereby increasing a size of a particular closely-packed block as the particular closely-packed block moves toward the center of the viewport of the display unit;

wherein the least distance is determined from the center of the subsequent block.

#### REFERENCES

The prior art relied upon by the Examiner as evidence in rejecting the claims on appeal is:

Gallo et al. ("Gallo")	US 2001/0028369 A1	Oct. 11, 2001
Bowen et al. ("Bowen")	US 2003/0105620 A1	June 5, 2003
DeLine ("DeLine")	US 2007/0106975 A1	May 10, 2007
Chandhri al. ("Chandhri")	US 2008/0062141 A1	Mar. 13, 2008
Ohta et al. ("Ohta")	US 2008/0077910 A1	Mar. 27, 2008
Bragdon ("Bragdon")	US 2013/0346942 A1	Dec. 26, 2013
Chong et al. ("Chong")	US 2016/0093232 A1	Mar. 31, 2016

## REJECTIONS

Claims 1–20 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter. Final Act. 13.

Claims 1–10 stand rejected under 35 U.S.C. § 112(b) as being indefinite. Final Act. 12.

Claims 1, 2, 4, 6–9, and 11–19 stand rejected under 35 U.S.C. § 103 as being obvious over Chandhri, Gallo, and Bragdon. Final Act. 17.

Claim 3 stands rejected under 35 U.S.C. § 103 as being obvious over Chandhri, Gallo, Bragdon, and Chong. Final Act. 31.

Claim 5 stands rejected under 35 U.S.C. § 103 as being obvious over Chandhri, Gallo, Bragdon, Ohta, and DeLine. Final Act. 33.

Claims 10 and 20 stand rejected under 35 U.S.C. § 103 as being obvious over Chandhri, Gallo, Bragdon, and Bowen. Final Act. 35.

## ANALYSIS

### *Section 112 Rejection*

Appellants argue the Examiner erred in concluding the term “closely-packed” (i.e., the claimed “set of closely-packed blocks”) is indefinite. Specifically, Appellants argue “closely-packed” is a common term, and in light of the Specification, a person of skill in the art would be apprised of the meaning. App. Br. 16–17 (citing Spec. ¶¶ 32–33, Figs. 8–11); *see* Reply Br. 3. According to Appellants, the Specification provides the proper interpretation of “closely-packed,” by disclosing “that ‘miniature views’ of program code blocks are displayed on a viewport such that a large amount of

program code files can be displayed.” Reply Br. 3 (citing Spec. ¶¶ 32–33, Figs. 8–11).

The Examiner concludes “closely-packed” is “a relative term which renders the claim indefinite.” Final Act. 12. Specifically, the Examiner finds the term is “not defined by the claim” and “the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.” Final Act. 12. According to the Examiner, “it is not clear how close or how much close must be to qualify as ‘closely-packed.’” Final Act. 12; *see* Ans. 9.

“[W]e apply the approach for assessing indefiniteness approved by the Federal Circuit in *Packard*, i.e., ‘[a] claim is indefinite when it contains words or phrases whose meaning is unclear.’” *In re McAward*, Appeal 2015-006416, 2017 WL 3669566, \*5 (PTAB Aug. 25, 2017) (precedential) (quoting *In re Packard*, 751 F.3d 1307, 1310, 1314 (Fed. Cir. 2014)). “Put differently, ‘claims are required to be cast in clear—as opposed to ambiguous, vague, indefinite—terms.’” *Id.* (quoting *Packard*, 751 F.3d at 1313); *see also* MPEP § 2173.02(1). “Reference to undefined standards, regardless of whose views might influence the formation of those standards, fails to provide any direction to one skilled in the art attempting to determine the scope of the claimed invention.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1352 (Fed. Cir. 2005).

We are not persuaded by Appellants’ argument. As currently recited in claim 1, we agree with the Examiner that it is unclear *how close* is “closely-packed,” as claimed. That is, the claimed “closely-packed” is only described to be “beneficial for fitting a large amount of program code files to

the viewport of a display unit.” Spec. ¶ 32. The claimed “closely-packed,” in light of the Specification, is a relative term that is described by another relative term (i.e., “fitting a large amount”), without any further limiting definition.

Accordingly, we sustain the Examiner’s rejection of independent claim 1, along with the rejection of dependent claims 2–10, as indefinite.

### *Section 101 Rejection*

#### *The Alice/Mayo Framework Governing Patent-Eligible Subject Matter*

Patent-eligible subject matter is defined in § 101 of the Patent Act, which recites: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”

There are, however, three judicially created exceptions to the broad categories of patent-eligible subject matter in § 101: laws of nature, natural phenomena, and abstract ideas. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 215–17 (2014); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70–71 (2012). Although an abstract idea, itself, is patent-ineligible, an application of the abstract idea may be patent-eligible. *Alice*, 573 U.S. at 217. Thus, we must 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.* (citing *Mayo*, 566 U.S. at 79). The claim must contain elements or a combination of elements that are “sufficient to ensure that the

patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.” *Id.* (citing *Mayo*, 566 U.S. at 79).

The Supreme Court set forth a two-part “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Id.* at 217.

First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. [*Mayo*, 566 U.S. at 75–77]. If so, we then ask, “[w]hat else is there in the claims before us?” *Id.*, at —, 132 S. Ct., at 1297. To answer that question, we 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.*[ at 79, 77–78]. We have described step two of this analysis as a search for an “inventive concept”—*i.e.*, an element or combination of elements that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Id.*[ at 72–73].

*Id.*

“The ‘abstract idea’ step of the inquiry calls upon us to look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Tex. v. DirectTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)); *see also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). There is no definitive rule to determine what constitutes an “abstract idea.” Rather, the Federal Circuit has explained that “both [it] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish*, 822 F.3d at 1334; *see also Amdocs (Israel) Ltd. v. Openet*

*Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (explaining that, in determining whether claims are patent eligible under § 101, “the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided”).

Under the second step of the *Alice/Mayo* framework, we examine the claim limitations “more microscopically,” *Elec. Power*, 830 F.3d at 1354, to determine whether they contain “additional features” sufficient to “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78). “Mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea. Rather, the components must involve more than performance of well-understood, routine, conventional activit[ies] previously known to the industry.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 613 (Fed. Cir. 2016) (citing *Alice*, 573 U.S. at 224–25).

The Examiner concludes the claims are directed to

an abstract idea of ‘an idea ‘of itself’ involving search, display the set of closely-packed blocks by placing an initial block at the center of the viewport of the display unit and place a subsequent block to the left, right, below, or above the initial block, such that the subsequent block is placed a least distance from the center of the viewpoint of the display unit.

Final Act. 14; *see* Ans. 4–5. According to the Examiner, the present claim is similar to that of *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241 (Fed. Cir. 2016), “where the court found the claim to be an abstract idea because it describes a process of generating a second menu from a first menu and sending the second menu to another location.” Final Act. 14; *see* Ans. 4–5.

Appellants argue the Examiner's comparison of the present claims to the patent-ineligible claims in *Ameranth* is in error. App. Br. 12–13. Specifically, Appellants argue that, unlike in *Ameranth*, the present “claims are not directed to generating menus and sending the generated menus to other locations,” and are instead “directed to the technically rooted process of recognizing patterns in software code.” App. Br. 12; *see* App. Br. 13.

Based on the current record, we are persuaded by Appellants' arguments that the Examiner erred. The Examiner has not shown sufficiently that the claims at issue are analogous to those found to be abstract ideas in *Ameranth*. In *Ameranth*, the court held the claims were directed to the “ability to generate menus with certain features,” but did “not claim a particular way of programming or designing the software to create menus that have these features,” and therefore were “not directed to a specific improvement in the way computers operate.” *Ameranth*, 842 F.3d at 1241. Here, as identified by Appellants, the claims are directed to “the display of the closely-packed blocks [being moved] about the center of the viewport of the display unit, thereby increasing a size of a particular closely-packed block as the particular close-packed block moves toward the center of the viewport of the display unit,” which “is rooted in computer technology because this feature simply could not be implemented without a computer processor” and could not be implemented on a paper-based system. Reply Br. 2.

Moreover, we agree with Appellants that the present claims are more similar to Example No. 23 in the USPTO's *July 2015 Update Appendix 1: Examples for Guidance on Subject Matter Eligibility* and are “necessarily rooted in computer technology to overcome a problem specifically arising

with graphical user interfaces.” App. Br. 13; *see* Reply Br. 2–3. The claimed invention is directed to “displaying blocks such that there is no overlap” (i.e., displaying results for the search of an input string in a plurality of program code files in a manner of closely-packed blocks that are iteratively placed at a least distance from center and without overlapping that increase in compression rate and size towards the center of the viewport), which is akin to Example No. 23’s patent-eligible “relocating obscured text on a computer graphical user interface.” App. Br. 13.

Accordingly, we reverse the Examiner’s rejection that claims 1–20 are directed to patent-ineligible subject matter.

#### *Section 103 Rejection*

Claim 1 recites “plac[ing] a subsequent block to the left, right, below, or above the initial block, such that the subsequent block is placed a least distance from the center of the viewport of the display unit.”

The Examiner finds Gallo teaches the claimed placing a block to the left, right, below, or above the initial block, a least distance from the center of the viewport. Final Act. 21 (citing Gallo Figs. 1, 2, 7-10, 13-17); *see* Ans. 12–17 (citing Gallo Figs. 1-2, 7-10, 13-17). According to the Examiner, Gallo’s element 16 represents the center of view point and the elements 12, 14, and 18 represent subsequent blocks. Ans. 16–17 (citing Gallo Fig. 1).

Appellants contend Gallo’s illustrated “several views of a spatial user interface (SUI)” does not teach “any action of placing subsequent blocks to the right, left, below, or above an initial block” and instead only teaches “a display of a SUI with all of its facets already in place.” App. Br. 19–20. According to Appellants, in Gallo, there is “simply no teaching of the

placement of subsequent blocks, or the placing of subsequent blocks a least distance from the center of a viewport.” App. Br. 20; *see* Reply Br. 5.

We are persuaded by Appellants’ argument as the Examiner has not identified sufficient evidence or provided sufficient explanation as to how Gallo teaches subsequent block placement as claimed.

The cited sections of Gallo show:

SUI 10 preferably includes an armature 12 having a plurality of ribs 14. Ribs 14 define a plurality of portals 16. Portals 16 may be empty or may contain sensory cues 18. Sensory cues 18 server to provide a cue as to the content contained within the portal 16 in which they are located.

Gallo ¶ 52. In other words, the sections of Gallo cited by the Examiner and on the record before us do *not* teach subsequent block placement as claimed. Instead, it describes the structure without discussing placement of any blocks. Therefore, we agree with Appellants that the Examiner’s finding that Gallo teaches the disputed limitation is in error because it is not supported by a preponderance of the evidence. *See In re Caveney*, 761 F.2d 671, 674 (Fed. Cir. 1985) (The Examiner’s burden of proving non-patentability is by a preponderance of the evidence.); *see also In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967) (“The Patent Office has the initial duty of supplying the factual basis for its rejection. It may not, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis.”).

Accordingly, we are constrained on the record before us to reverse the Examiner’s § 103 rejection of independent claim 1, along with the § 103 rejection of claim independent claims 11 and 16, which recite limitations

commensurate in scope to the disputed limitation discussed above, and dependent claims 2, 4, 6–9, 12–15, and 17–19. *See* App. Br. 21.

Moreover, because the Examiner has not shown that the additional references cure the foregoing deficiency regarding the rejection of the independent claims 1, 11, and 16, we will not sustain the obviousness rejections of dependent claims 3, 5, 10, and 20.

#### DECISION

The Examiner’s rejection of claims 1–10 under 35 U.S.C. § 112, second paragraph, is affirmed.

The Examiner’s rejection of claims 1–20 under 35 U.S.C. § 101 is reversed.

The Examiner’s rejections of claims 1–20 under 35 U.S.C. § 103 are reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED-IN-PART