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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YUVAL CARMEL, GUY PELEG, and MICHAL HALAMISH

Appeal 2017-001521
Application 13/198,893¹
Technology Center 2400

Before ERIC B. CHEN, BRUCE R. WINSOR, and
PHILLIP A. BENNETT, *Administrative Patent Judges*.

WINSOR, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the final rejection of claims 21 and 23–40, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

¹ According to Appellants, the real party in interest is Hewlett Packard Enterprise Development LP, which is a wholly-owned affiliate of Hewlett Packard Enterprise, and is managed by Enterprise DC Holdings LLC. Br. 3.

STATEMENT OF THE CASE

Appellants' disclosed invention relates to "tracking configuration changes in a monitored environment as part of incident/problem management or auditing activities." Spec. ¶ 1. Claims 21 and 30, which are illustrative, read as follows:

21. A method for managing configuration of an environment of composite configuration items (CIs), the method comprising, with a processor:

obtaining a snapshot of the configuration of the environment comprising current configuration data about the CIs in the environment at a time of the snapshot;

logging the snapshot of the configuration of the environment in a configuration database, where the configuration database stores the snapshot;

identifying a set of changes to the environment using the configuration database;

storing the identified changes in a change database, wherein the change database is accessible from an external device through a graphical user interface (GUI), wherein the change database is provided to the external device in a format that includes selectable filters, wherein the filters of the change database are preset in the GUI based on content of the change database; and

receiving a request for current configuration data from the external device and providing the requested current configuration data to the external device through the GUI.

30. A data processing system for evaluating changes to a network environment, the system comprising:

an external device including a processor;

a graphical user interface (GUI) on the external device to, in response to a user request through the external device:

display a topology of changes to a network environment;

display filtered data, wherein the filtered data comprises changes to a network environment;

request configuration data of a composite configuration item (CI) from a configuration database;

display the configuration data received in response to the request made to the configuration database.

Claim 30 stands rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception, i.e., an abstract idea, without significantly more. *See* Final Act. 3–6.

Claims 21, 23, 25–28, and 30–37 stand rejected under 35 U.S.C. § 103(a)² as being unpatentable over Montagna et al. (US 8,356,088 B2, issued Jan. 15, 2013; hereinafter “Montagna”) and McKay (US 8,447,737 B2, issued May 21, 2013). *See* Final Act. 7–19.

Claims 24, 29, and 38–40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Montagna, McKay, and Kephart et al. (US 2007/0100892 A1, published May 3, 2007; hereinafter “Kephart”). *See* Final Act. 19–23.

Rather than repeat the arguments here, we refer to the Appeal Brief (“Br.” filed Mar. 10, 2016) and the Specification (“Spec.” filed Aug. 5, 2011) for the positions of Appellants and the Final Office Action (“Final Act.” mailed Oct. 15, 2015) and Answer (“Ans.” mailed Sept. 15, 2016) for the reasoning, findings, and conclusions of the Examiner. Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants did not make in the Briefs have not

² All prior art rejections are under the provisions of 35 U.S.C. in effect prior to the effective date of the Leahy-Smith America Invents Act of 2011. Final Act 2.

been considered and are deemed to be waived. *See* 37 C.F.R.
§ 41.37(c)(1)(iv) (2015).

ISSUES

The issues presented by Appellants' arguments are as follows:

Does the Examiner err in finding claim 30 is directed to an abstract idea, without significantly more?

Does the Examiner err in finding the combination of Montagna and McKay teaches or suggests “the change database is provided to the external device in a format that includes selectable filters, wherein the filters of the change database are preset in the GUI based on content of the change database” (hereinafter the “database and filter limitation”), as recited in claim 21?

Does the Examiner err in finding the combination of Montagna and McKay teaches or suggests “displaying, with the GUI, a configuration of one of the CIs at two different time points in a side by side format” (hereinafter the “side by side limitation”), as recited in claim 26?

Does the Examiner err in finding the combination of Montagna and McKay teaches or suggests “with the GUI, automatically marking and characterizing differences between two displayed configurations” (hereinafter the “marking and characterizing limitation”), as recited in claim 27?

Does the Examiner err in finding the combination of Montagna and McKay teaches or suggests “display[ing] a topology of changes to a network environment” (hereinafter the “topology of changes limitation”), as recited in claim 30?

Does the Examiner err in finding the combination of Montagna and McKay teaches or suggests “the GUI allows a user to: display a topology of the CI-level database” (hereinafter “the CI-level topology limitation”), as recited in claim 36?

ANALYSIS

We review the appealed rejections for error based upon the issues identified by Appellants, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

REJECTION UNDER 35 U.S.C. § 101

Patent eligibility is a question of law that is reviewable *de novo*. *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012). To be statutorily patentable, the subject matter of an invention must be a “new and useful process, machine, manufacture, or composition of matter, or [a] new and useful improvement thereof.” 35 U.S.C. § 101. The Supreme Court has held that there are implicit exceptions to the categories of patentable subject matter identified in § 101, including laws of nature, natural phenomena, and (3) abstract ideas. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). Further, the 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.” *Id.*, citing *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012). The evaluation follows the two-part analysis set forth in *Mayo*: (1) determine whether the claim is directed to a patent-ineligible concept, e.g., an abstract idea; and (2) if an abstract idea is present in the claim, determine whether any element, or combination

of elements, in the claim is sufficient to ensure that the claim amounts to significantly more than the abstract idea itself. *See Alice*, 134 S. Ct. at 2355.

Our reviewing court has

described the first-stage inquiry as looking at the “focus” of the claims, their “character as a whole,” and the second-stage inquiry (where reached) as looking more precisely at what the claim elements add—specifically, whether, in the Supreme Court’s terms, they identify an “inventive concept” in the application of the ineligible matter to which (by assumption at stage two) the claim is directed.

Electric Power Group LLC v. Alstom S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016).

In concluding claim 30 is patent-ineligible, the Examiner applies *Mayo/Alice* step 1, finding “[c]laim 30 is directed to the basic abstract idea of using categories to organize, store and transmit information, as well as comparing new and stored information and using rules to identify options.” Final Act. 3. The Examiner next applies *Mayo/Alice* step 2, finding “[t]he claim does not include additional elements that amount to significantly more than the judicial exception.” *Id.* We find no error in the Examiner’s findings and conclusion.

Mayo/Alice Step 1

We see no principled distinction between the patent-ineligible “[m]ethod of detecting events on an interconnected electric power grid in real time over a wide area and automatically analyzing the events on the interconnected electric power grid,” at issue in *Electric Power*, 830 F.3d at 1351, and the “data processing system for evaluating changes to a network environment,” at issue here. Claim 30 recites an “external device” having a “processor” and a “GUI,” i.e., a generic computer, “for evaluating changes

to a network environment.” The recited functions performed by the generic computer are limited to displaying information and requesting data from a database. There are no recited functions for acquiring data from the network environment, manipulating the displayed information, or acting on the network environment in any way. Our reviewing court “ha[s] recognized that merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis.”). *Electric Power*, 830 F.3d at 1354. To be sure, claim 30 does recite displaying a topology of changes to a network environment (*see* Br. 10), but does not recite any functions for identifying the changes or organizing them into a topology, i.e., does not “identify[] a particular tool for presentation,” *Electric Power*, 830 F.3d at 1354, other than a generically recited GUI. Additionally, although claim 30 does recite certain characteristics of the displayed data (*see* Br 10), there is no recitation of functions that change the data. For example, although the claim recites “display[ing] filtered data, wherein the filtered data comprises changes to [the] network environment,” there is no recited function for filtering the data. Our reviewing court “ha[s] treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.” *Electric Power*, 830 F.3d at 1353.

Unlike the claim in *Electric Power*, claim 30 does not recite any analysis of the collected and displayed information. *Cf. Electric Power*, 830 F.3d at 1354 (“[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.”).

We conclude that, like the claim in *Electric Power*, claim 30 is focused on the combination of abstract-idea processes and is, therefore, directed to an abstract idea. Based on the foregoing, we conclude claim 30 is directed to a patent-ineligible abstract idea because it is, at most, merely a method of organizing, comparing, and displaying data that can be performed in a human mind or using pen and paper.

Mayo/Alice Step Two

Appellants contend “the claimed invention integrates the building blocks of human ingenuity into something more than the exception by applying the abstract idea in a meaningful way, and as such, is directed to patentable subject matter. Br. 10–11. We disagree.

When considering the elements recited in claim 30 individually or as an ordered combination, we find nothing in the claim that is sufficient to ensure that the claim amounts to significantly more than the abstract idea itself. The claimed invention does not improve another technology or technology field or effect a transformation or reduction of a particular article to a different state or thing like the claim at issue in *Diamond v. Diehr*, 450 U.S. 175 (1981). The claim does not add a specific limitation other than that which is well-known in the field like the claim at issue in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). The claim does not effectuate an improvement in how the computer itself functions, like the claim at issue in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). Although claim 30 does recite a system for evaluating changes in a networked environment, it is devoid of any functions that affect how the

networked environment operates. Indeed, we see nothing in claim 30 that goes beyond generally linking the use of the abstract idea to a particular technological environment and applying it using a computer.

Therefore, based on the foregoing, we conclude claim 30 does not recite any element or combination of elements such that claim 30 amounts to significantly more than the abstract idea itself.

Summary

Appellants do not demonstrate error in the rejection of claim 30 as being directed to a patent-ineligible abstract idea. Accordingly, we sustain the rejection of claim 30 under 35 U.S.C. § 101.

REJECTIONS UNDER 35 U.S.C. § 103(A)

Claim 21

The Examiner relies on the combination of Montagna and McKay to teach the database and filter limitation. *See* Final Act. 8, 10–12 (citing Montagna, col. 13, ll. 19–34, col. 14, l. 52–col. 15, l. 11, col. 18, ll. 7–32, Figs. 1, 4, 8; McKay, col. 3, l. 65–col. 4, l. 4, col. 4, ll. 45–47, col. 5, ll. 7–10, col. 5, l. 66–col. 6, l. 5, col. 8, ll. 9–28, Figs. 1, 3). More particularly the Examiner “reli[es] upon Montagna for disclosing a GUI with selectable filters, while using McKay for the teachings of the change database.” Final Act. 28–29 (bold-facing omitted). Appellants contend “the Final Office Action merely references Montagna’s user 3 as accessing or selecting a snapshot using a snapshot filter 910. The filter 910 is not, however, a filter that is preset based on a content of a change database.” Br. 13.

Appellants’ argument does not demonstrate error in the Examiner’s rejection of claim 21 because it is not commensurate with the rejection as

explained by the Examiner. Rather than relying solely on Montagna's snapshot filter 910 the Examiner explains that "Montagna teaches that the user 3 can also filter the results by selecting the *result status filter link 912*, which allows a user 3 to *filter the results of the snapshot by new, missing, and specifically changed items* for any server, server group, etc." Final Act. 29–30 (italics added; bold-facing omitted) (referring to Montagna, Fig. 8) (quoted at Br. 13). We do not identify any error in the Examiner's reliance on Montagna's result status filter link, in combination with McKay's change log database (McKay, Fig. 3) to teach the database and filter limitation.

The Examiner concludes as follows:

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Montagna and McKay before him or her, to modify the configuration management system 6 of Montagna to include the change log database 310 of McKay, with reasonable expectation that this would result in a system that allowed users to select specific view of previous configurations of the [CIs] in accordance with user selectable attributes (McKay, FIG. 3, col. 8, lines 9-28). This method of improving the configuration management system of Montagna was well within the ordinary ability of one of ordinary skill in the art based on the teachings of McKay.

Final Act. 12 (bold-facing omitted). In other words, the Examiner concluded the articulated combination of Montagna and McKay is "[t]he combination of familiar elements according to known methods . . . [that] does no more than yield predictable results," *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007), and can be implemented by a person of ordinary skill in the art, *id.* at 417, – an obvious variation.

Appellants contend "it is entirely unclear why one of ordinary skill in the art would have modified Montagna's GUI in view of McKay, such that

the GUI has filters that are present based on a content of a change database, absent impermissible hindsight gleaned solely from the present application.” Br. 13. We disagree. The Examiner has articulated a reason to combine that is reasonable on its face, consistent with controlling law, and has rational underpinnings drawn from evidence in the record. *See KSR*, 550 U.S. at 418 (“[T]here must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (*quoting In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006))). Appellants’ conclusory argument points to no specific failing in the Examiner’s rationale for combining Montagna and McKay. Such lawyer’s arguments and conclusory statements, unsupported by factual evidence, are entitled to little probative value. *Cf. In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) (“An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness.”).

For the foregoing reasons we sustain the rejections of claim 21 and claims 23–25 and 29, which depend from claim 21 and were not separately argued with particularity

Claim 26

The Examiner relies on Montagna to teach the side by side limitation. Final Act. 13 (citing Montagna, Fig. 7); *see also* Montagna, Fig. 8.

Appellants contend as follows:

One of ordinary skill in the art would not glean from Fig. 7, or its discussion, that the configuration setting changes in Fig. 7 pertain to the same configuration setting at different times. It is noted that in the identifier column 806, the ‘X’ is merely a wildcard identifier. *See, for example*, the server name in column 802, for example.

Br. 14.

Appellants' argument does not demonstrate Examiner error because it is not commensurate with either the claim or the rejection articulated by the Examiner. As pointed out by the Examiner, the side by side limitation makes no mention of configuration *settings*. Ans. 22. Rather it recites "displaying . . . a configuration of one of the CIs at two different time points in a side by side format." *Id.* The Examiner broadly, but reasonably, construes "a configuration" to encompass configuration information. *Id.* The Examiner goes on to explain as follows:

[A]s stated in the Final Action, FIG. 7 illustrates the GUI displaying the configuration information of a CI at two different time points. *The information is clearly shown together [i.e., side by side], listed at item 808 of FIG. 7, the current size 36.08 KB at time 01/31/2008 21:58:52, the reference size 37.08 KB at time 07/21/2010 21:02:56 (See Montagna, FIG. 7, item 808).*

Ans. 22 (bold-facing omitted, italics added). In other words, the Examiner is relying on the side by side display of two values of configuration information and associated time stamps presented in a single row of Montagna's Figure 7. We agree with the Examiner.

For the foregoing reasons, we sustain the rejection of claim 26 and claim 28, which depends from claim 26 and was not separately argued with particularity.

Claim 27

The Examiner relies on Montagna to teach the marking and characterizing limitation. Final Act. 13 (citing Montagna, Fig. 7). The Examiner explains that Montagna teaches identifying differences between snapshots (Montagna, col. 15, ll. 7–11) and characterizing those differences (*id.*, ll. 25–37). Ans. 24–25. The Examiner then explains that the display

illustrated in Montagna's Figure 7 "clearly indicates the difference between a reference configuration item and a current configuration item." Final Act. 25.

Appellants contend as follows:

Fig. 7 merely shows changes in two configuration settings. One row of Fig. 7 is not compared or contrasted with another row, as each row pertains to a different configuration setting. As such, there is no teaching or suggestion in Montagna that the rows pertain to configuration differences or that the differences between two rows of Fig. 7 are marked.

Br. 15. We agree with Appellants.

Although, as discussed *supra* regarding claim 26, Appellants incorrectly focus on the differences between two rows of Montagna's Figure 7, their argument is equally applicable the two values in a single row of Figure 7 relied upon by the Examiner. Although the Examiner is correct Montagna teaches automatically identifying and characterizing differences between snapshots (*see* Ans. 24–25), the Examiner does not explain how those identifications and characterizations are reflected in the side by side display of configuration information of Figure 7. Further, although the Examiner is correct that a user could identify differences from the side by side display of configuration information, that falls short of the recited claim limitation, which requires actually automatically *marking* and *characterizing* the differences.

For the forgoing reasons we do not sustain the rejection of claim 27.

Claim 30

The Examiner relies on Montagna combined with McKay to teach the topology of changes limitation. Final Act. 15 (citing Montagna, Fig. 7);

Ans. 27–28 (additionally citing Montagna Fig. 8; McKay, col. 3, l. 67–col. 3, l. 9). The Examiner explains as follows:

Montagna teaches that FIG. 8 is providing the configuration management interface for reviewing the reports regarding the configuration settings of the servers. In particular, FIG. 8 discloses the results interface 900, which allows the user 3 to access any snapshot, server, group of servers, application, configuration schema, results identifier, or specific file that is related to the configuration management application 20. The user 3 can select a snapshot from the snapshot filter 910 drop down list to view any snapshot taken by the configuration management application 20 in the past (See FIG. 8, item 942, illustrating the results column).

Furthermore, McKay also discloses (though not expressly visible) an [graphical user] interface for users to perform various operations that may facilitate interaction with the configuration management server 130 including, e.g., managing/accessing configuration item records, providing requests for one or more states of configuration items, receiving/providing information (for example, configuration related information or other information) associated with configuration items, and/or performing other operations (See McKay, col. 3, line 67–col. 4, line 9).

Ans. 27–28 (bold-facing omitted, brackets in original). The Examiner explains that the “interprets the recited ‘*topology*’ . . . as merely ‘*configuration information*,’ which is commensurate in scope with each of FIG. 1–3 of the [Specification].” Ans. 30 (emphases in original) (discussing claim 32).

Appellants contend that the GUIs taught by Montagna and McKay merely display information, arguing, “[t]he mere display of configuration changes fails to disclose or render obvious a topology of changes or a topology of changes to a network environment.” Br. 16. We agree with Appellants.

As understood in the art a topology is “[t]he physical or logical arrangement of the stations (nodes) in a communications network.” MCGRAW-HILL DICTIONARY OF ELECTRICAL AND COMPUTER ENGINEERING 590 (2004). Therefore a display of a topology of changes to a network environment requires displaying the physical or logical arrangement of the changes. *See, e.g.*, Spec. Fig. 6 (item 620). The Examiner appears to have conflated “topology” with “configuration.” *See* Ans. 30. Although it is true that “topology” is a specific form of “configuration information,” the teaching of displaying configuration information, generally, does not, without more, teach displaying that information as a topology.

We have reviewed the cited passages of Montagna and McKay and find nothing that teaches or suggests displaying anything in the form of a topology. Montagna does teach additional tabs in the GUI illustrated in Figure 8 (e.g., “configuration”), but provides no information as to the form the displayed information would take when those tabs are selected.

For the foregoing reasons we do not sustain the rejection under 35 U.S.C. § 103(a) of claim 30 and claims 31–35,³ which depend from claim 30

Claim 36

The Examiners findings, conclusions, and explanations, and the Appellants’ arguments regarding the CI-level topology limitation are substantially similar to those for the topology of network changes limitation

³ In the event of further prosecution, the Examiner may wish to consider whether claim 32 (or any other claim) complies with 35 U.S.C. § 112(a). *See* Ans. 30 (“Clearly, neither the above passage recited from paragraph [0030], nor the information illustrated in FIG. 6 depict an actual ‘*topology of changes*,’ let alone ‘*two different topologies shown simultaneously*’.” (emphases and brackets in original)).

of claim 30. *Compare* Final Act. 18, *with id.* at 15; *compare* Ans. 30, *with id.* at 27–28; *compare* Br. 18, *with id.* at 16–17.

We agree with Appellants for substantially the same reasons as set forth *supra* regarding claim 30. Accordingly, we do not sustain the rejections of claim 36 and claims 37–40, which depend from claim 36.

DECISION

The decision of the Examiner to reject claim 30 under 35 U.S.C. § 101 is affirmed.

The decision of the Examiner to reject claims 21, 23–26, 28, and 29 under 35 U.S.C. § 103(a) is affirmed.

The decision of the Examiner to reject claims 27 and 30–40 under 35 U.S.C. § 103(a) is 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). *See* 37 C.F.R. §§ 41.50(f), 41.52(b) (2013).

AFFIRMED-IN-PART