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Intellectual Property Department
P.O. Box 10064
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ZELASKIEWICZ, CHRYSTINA E

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEPHEN M. DAVIS, PHILIP T. HO, and
RAKESH K. PARIMI

Appeal 2017-008441
Application 13/448,745
Technology Center 3600

Before JOSEPH L. DIXON, JUSTIN BUSCH, and
JENNIFER L. McKEOWN, *Administrative Patent Judges*.

BUSCH, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellants appeal from the Examiner’s decision to reject claims 1–15 and 17–21, which constitute all the claims pending in this application. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b). We affirm.

CLAIMED SUBJECT MATTER

Appellants’ claimed invention relates to “a service oriented architecture (SOA) infrastructure for business process verification and systems integrated testing.” Spec. ¶ 1. SOA allows business processes to be packaged as services (“unassociated units of functionality, which have no

calls to each other embedded in them”) that are loosely coupled to the OS and programming languages underlying the applications but not tied to specific technologies. Spec. ¶¶ 3–4. According to the Specification, “existing SOA test tools are limited to single application specific functional, performance, end to end testing with short running transactions” and “have limited SOA test coverage for unit and functional tests only.” Spec. ¶ 5 (“That is, the current SOA tools have excellent performance testing, but with limited functional verification.”). The existing test tools also allegedly “have synchronous transaction execution and are primarily web services oriented test solutions” and “lack modeling capabilities for end-to-end process validations support, and do not support batch transaction processing.” Spec. ¶ 5. Appellants’ claimed invention uses a primary agent to identify the start of a particular business process, access context look-up services from a service manager to identify an action agent to perform a verification function, and calls that action agent. Spec. ¶ 7. Appellants’ invention allegedly “provides full coverage verification for all software test phase across an integrated set of systems.” Spec. ¶ 19. The invention’s action agents can call other action agents to do part of the validation work when the “business process is externalized across one or more application(s).” Spec. ¶ 22. “The framework of the present invention also provides a solution for verifying scenarios (functional verification and performance evaluation) that *typically requires manual verification or requires predefined setup of automated testing.*” Spec. ¶ 53 (emphasis added). Claim 1 is independent and reproduced below:

1. A computer system for verifying a particular function of a particular business process, the system comprising:

a CPU, a computer readable memory and a computer readable storage media;

first program instructions to detect, by one or more primary agents, a start of the particular business process;

second program instructions to provide, by one or more action agents, a testing service and a verification function of the particular business process, wherein the verification function is a determination of whether the particular business process in totality is executed successfully;

third program instructions to provide, by a service manager, context look-up services for one or more primary agents;

fourth program instructions to determine, by the service manager, an action agent which is responsible for a particular verification function of the particular business process, based on the context look-up services;

fifth program instructions to forward a reference of the action agent which is responsible for the particular verification function of the particular business process to a requesting primary agent;

sixth program instructions to invoke an action agent, by the requesting primary agent, to perform the particular verification function of the particular business process, wherein the particular verification function includes verifying at least one of a rational function tester (RFT) script, a rational tester for SOA Quality, a JAVA program, and a rational tester;

seventh program instructions to aggregate reports in a central repository, wherein the reports include one of a simple test result and a collection of test results;

eighth program instructions to consolidate the reports in the central repository; and

ninth program instructions to invoke a second action agent when it is determined that the business process cannot be completely verified by the action agent which is responsible for the particular verification function,

wherein the first, second, third, fourth, fifth, sixth, seventh, eighth, and ninth program instructions are stored on the computer readable storage media for execution by the CPU via the computer readable memory.

REJECTIONS

Claims 1–15 and 17–21 stand rejected under 35 U.S.C. § 101 as being directed to judicially excepted subject matter. Final Act. 3–6, 17–19.

Claims 1–15, 17, and 21 stand rejected under 35 U.S.C. § 103 as obvious in view of Slaughter (US 6,643,650 B1; Nov. 4, 2003) and Thain (US 2009/0216874 A1; Aug. 27, 2009). Final Act. 7–15, 20.

Claims 18–20 stand rejected under 35 U.S.C. § 103 as obvious in view of Slaughter, Thain, and Todd (US 6,742,059 B1; May 25, 2004). Final Act. 15–17.

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments that the Examiner erred. In reaching this decision, we have considered all evidence presented and all arguments Appellants made. Arguments Appellants could have made, but chose not to make in the Briefs, are deemed waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

THE 35 U.S.C. § 101 REJECTION

The Examiner concludes claims 1–15 and 17–21 are directed to judicially excepted subject matter. Final Act. 3–6, 17–19; Ans. 3–6. Appellants argue: (1) the Examiner has not presented a prima facie case the claims are directed to an abstract idea; (2) the claims are directed to an abstract idea; and (3) the claims recite additional elements that add significantly more to the alleged abstract idea. App. Br. 5–20; Reply Br. 2–13.

Prima Facie Case

Appellants argue the Examiner’s rejection is not supported because the Examiner has not clearly identified what limitations set forth the alleged

abstract idea. App. Br. 5; Reply Br. 2. Appellants also argue the Examiner has not established or explained why “verifying that a business process executed successfully” corresponds to any concepts determined to be ineligible by prior court decision. App. Br. 5; Reply Br. 2. We disagree.

The Federal Circuit has repeatedly noted that “the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production.” *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The court has, thus, held that the U.S. Patent and Trademark Office (USPTO) carries its procedural burden of establishing a prima facie case when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for rejection, “together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011). Thus, all that is required of the Office is that it set forth the statutory basis of the rejection, and the reference or references relied on, in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *Id.*; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (Section 132 “is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.”).

The Examiner’s rejection, as discussed further below, presents a prima facie case by identifying that Appellants’ claims are directed to particular concepts, which the Examiner explains are similar to abstract ideas courts have found ineligible, and explains why the additional elements do not amount to significantly more than the abstract idea. *See* Final Act. 3–

6 (explaining that all the recited steps are directed to concepts determined to be abstract ideas and the additional elements—i.e., CPU, memory, and storage media—are generic computer structure), 17–19; Ans. 3–6. Thus, the Examiner: set forth the statutory basis for the rejection, namely 35 U.S.C. § 101; concluded that the claimed invention is directed to a judicial exception to § 101, namely an abstract idea; and, contrary to Appellants’ contention, explained and analyzed the rejection in sufficient detail to permit Appellants to respond meaningfully. *See Jung*, 637 F.3d at 1362. In fact, the Appeal Brief addresses reasons Appellants’ claims allegedly are different than the identified concepts courts previously determined were abstract ideas. *See App. Br. 6–11; Reply Br. 2–6.*

The Examiner notified Appellants of the reasons for the rejection “together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” 35 U.S.C. § 132. In doing so, the Examiner set forth a prima facie case of ineligibility.

Step One of Alice Framework

In step one of the *Alice* analysis, we “determine whether the claims at issue are directed to” a patent-ineligible concept, such as an abstract idea. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354–55 (2014).

The Examiner determines the claims are directed to using multiple action agents to verify that a business process executed successfully, which involves only basic data processing functions (obtaining and comparing data). Final Act. 3–6, 18. The Examiner determines the additional limitations (i.e., the CPU, computer readable memory, and computer readable storage media) do not improve the computer itself or a technology,

but rather simply claim computer components at a high level of generality to perform the basic computer functions (e.g., storing and comparing data) to execute the abstract idea. Final Act. 6, 18–19 (citing *Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016)); *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607 (Fed. Cir. 2016)); Ans. 3–6 (citing *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (Fed. Cir. 2011)). The Examiner concludes Appellants' claims are not similar to the claims found eligible in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) because Appellants' claims merely perform an abstract business process using a conventional computer. Final Act. 19.

Appellants argue claim 1 is not directed to an abstract idea. App. Br. 6–11, 15; Reply Br. 12. Appellants argue the claims are directed to an improvement to computer functionality rather than simply using a computer in its ordinary capacity to perform an economic or other task. App. Br. 15 (citing *Enfish*, 822 F.3d 1327); Reply Br. 12. Appellants argue the Examiner overgeneralizes the claims and that “claim 1 does not recite elements directed to” the abstract idea of collecting and comparing information, a concept the Federal Circuit previously determined was abstract. App. Br. 6–7. Appellants argue claim 1's recited step of invoking a second agent “is not similar to collecting and comparing known information” because “a determination has to be made before a second action agent is invoked.” App. Br. 6–7.

Appellants also argue claim 1 is not similar to each abstract idea the Examiner identified. App. Br. 7–11. Specifically, Appellants argue the invoking a second agent step and/or the aggregating and consolidating reports steps are not similar to the identified abstract ideas (i.e., comparing

data to determine a risk level; obtaining and comparing data; comparing new and stored information and using rules to identify options; and data recognition and storage) because the claimed steps: (1) do not aid in determining a risk level; (2) require making a determination based on context-look up services; and (3) simply include all the results (rather than comparing data). App. Br. 7–11.

Appellants argue claim 1’s requirement of a service manager determining an appropriate action agent is more than simply “checking data” and the service manager forwarding “a reference of an action agent is more than simply [forwarding] data” or obtaining data. Reply Br. 2–3.

Appellants also argue invoking an action agent to perform one of various verification functions “is more than simply verifying a function because an action agent is invoked to verify” a particular one of the identified functions. Reply Br. 3. Appellants argue the aggregating and consolidating steps are more than just collecting data because the claim requires a service manager to compile reports. Reply Br. 3–4.

In response to the Examiner’s conclusion that Appellants’ claims are similar to those claims found directed to obtaining and comparing data and, therefore, determined ineligible in *CyberSource*, Appellants argue claim 1’s limitations are more than obtaining and comparing data. Reply Br. 4–6. Specifically, Appellants paraphrase each of claim 1’s limitations and argue each limitation is not simply obtaining and/or comparing data because the limitations perform functions according to the recited limitations. Reply Br. 4–5.

We agree with the Examiner’s conclusions because Appellants’ claims focus on managing a business process using components (e.g.,

primary agents) to determine which other components (e.g., action agents) need to be executed in order to verify a particular function of the business process. The claimed processes simply automate and aggregate test processes by storing references to action agents needed to verify particular functions and monitoring complex business processes to determine when to initiate the verification procedures. *See* Spec. ¶ 40. The concepts underlying Appellants' claims—i.e., the concepts to which Appellants' claims are directed—are obtaining data (a trigger identifying a start of a business process), analyzing the data to transmit a request for and receive additional information (a reference to instructions that perform verification functions) necessary to initiate execution of one or more particular verification functions, and collecting, aggregating, and consolidating other information (reports).

Appellants' claims recite computer instructions that “invoke” an action agent. However, Appellants' claimed invocation of an agent is simply an instruction to execute a generically recited “agent,” which is simply a set of program instructions to implement computer logic or function. *See* Spec. ¶¶ 20, 22 (“The action agents are implemented as BPELs and communicate using Web Services, but can also be implemented as Java Logic.”), 23. Notably, the details of the function or implementation of the agents is not claimed. Nor are the details described in Appellants' Specification beyond stating that the action agents perform a verification function to verify “at least one of a rational function tester (RFT) script, a rational tester for SOA Quality, a JAVA program, and a rational tester.” Accordingly, to the extent claimed and described in Appellants'

Specification, the recited invoking step is merely a basic computer function of identifying a program or module for a processor to execute.

We are not persuaded by Appellants' conclusory statement that the claims improve the way computers operate rather than using computers to perform tasks. *See* App. Br. 15; Reply Br. 12. Although the claims recite a CPU, memory, storage media, and instructions to execute the recited steps, these elements do not change the character of the claims as a whole.

Appellants' other arguments that the claims are not directed to abstract ideas are similarly conclusory and unpersuasive. To the extent these arguments go beyond paraphrasing claim limitations and concluding the claims are different than the concepts the Examiner identifies, Appellants merely argue certain limitations recite more than just collecting and comparing information because the recited determinations are performed in a certain order or involve a service manager (to perform look-up services or compile data). *See* App. Br. 6–11; Reply Br. 2–4.

The Federal Circuit has concluded similar concepts were directed to abstract ideas. Specifically, in *Electric Power*, the Federal Circuit concluded claims reciting a method of collecting data from various sources, “detecting and analyzing events” by identifying information in the received data, reporting the event analysis results and visualizations of measurements, aggregating the event analysis information, and providing a composite indicator were directed to an abstract idea because the claims were directed to “collecting information, analyzing it, and displaying certain results of the collection and analysis.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351–53 (Fed. Cir. 2016).

Similarly, the Federal Circuit concluded claims directed to collecting and analyzing information and presenting the results were ineligible as claiming no more than an abstract idea. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *see also Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1372 (Fed. Cir. 2017) (concluding “claims directed to the collection, storage, and recognition of data are directed to an abstract idea”); *SAP Am., Inc. v. InvestPIC, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (“merely presenting the results of abstract processes of collecting and analyzing information . . . is abstract as an ancillary part of such collection and analysis”) (quotations omitted); *CyberSource*, 654 F.3d at 1370 (concluding claims reciting steps for verifying credit card transactions over the Internet were ineligible because the claimed method “simply requires one to ‘obtain and compare intangible data pertinent to business risks.’”). The Federal Circuit determined the fact that a method is claimed using a computer implementation does not render the subject matter eligible. *See CyberSource*, 654 F.3d at 1375.

Moreover, limiting the particular data analyzed does not change the character of the claim. *See Elec. Power*, 830 F.3d at 1353 (stating that “collecting information, including when limited to particular content (which does not change its character as information)” is treated as “within the realm of abstract ideas”). Thus, the particular event type information or service state values transmitted between the repository, computer, and SOA components do not change the character of the claims.

We agree with the Examiner that the claims are directed to an abstract idea and, thus, turn to step 2 of the *Alice* analysis.

Step Two of Alice Framework

In step two of our *Alice* analysis, we determine whether the *additional* limitations, when considered both “individually and ‘as an ordered combination’” contain an “inventive concept” sufficient to transform the claimed “abstract idea” into a patent-eligible application. *Alice*, 134 S. Ct. at 2355–58.

The Examiner finds the particularly recited steps simply describe the abstract idea and the only portions of the claims that are not the part of the abstract idea are the CPU, memory, and storage media. Final Act. 6, 19; Ans. 4–5. The Examiner concludes these elements do not add significantly more to the abstract idea sufficient to render the claims patent-eligible because these elements are generically recited computer structure and using a general purpose computer to perform the claimed steps does not render the subject matter patent-eligible. Final Act. 6, 19; Ans. 5. The Examiner determines the claims do not recite an improvement in computers, another technology, or another technical field; rather the alleged improvements are to a particular business process. Final Act. 19; Ans. 5–6. The Examiner concludes the claims, therefore, do not include *additional* limitations that amount to significantly more because the claims: require only generic computer elements to implement the claimed abstract idea; are not rooted in computer technology; and do not recite an improvement to another technology or technical field. Final Act. 6, 19; Ans. 4–6. The Examiner also concludes the dependent claims neither change the character of the claims as a whole nor add significantly more to the abstract idea. Ans. 6.

Appellants argue the claimed steps add significantly more to the abstract idea because the claims: improve another technology or technical

field; confine the claims to a useful application having limitations that are beyond what was well-understood, routine and conventional; and have meaningful limitations beyond linking the abstract idea to a particular technological environment. App. Br. 13–15; Reply Br. 7–9, 11–12.

Appellants paraphrase some of the claim limitations and assert, without further explanation, that the limitations are more than well-understood, routine, and conventional activities or otherwise add significantly more to the abstract idea. App. Br. 13; Reply Br. 6 (arguing certain steps are not well-understood, routine, and conventional because the steps are not just receiving and sending data), 10–11; *see also* App. Br. 14 (paraphrasing the entirety of claim 1 and, without further explanation, asserting claim 1 includes an inventive concept because it “is a non-conventional and non-generic arrangement of elements.”).

For example, Appellants argue the aggregating and consolidating data steps are more than insignificant extra-solution activity because the steps are not just data gathering. Reply Br. 7. Appellants argue that determining an action agent based on context look up services improves “the technology and technical field of verification and testing in a service oriented architecture.” App. Br. 13. Appellants also argue, without further explanation, the determining, aggregating, and consolidating steps do not just apply an abstract idea on a computer. App. Br. 14; Reply Br. 7. Appellants argue the verification function verifies a particular verification function, which is a meaningful limitation beyond simply linking the abstract idea to a technological environment. App. Br. 13.

Appellants argue the generic computing components are not just performing well-understood, routine, and conventional functions because

they are performing the recited functions and overcome the problems identified in Appellants' Specification. Reply Br. 7–9 (citing Spec. ¶ 5). Appellants argue the claims allow “for full coverage verification of all software test phases across an integrated set of systems.” App. Br. 14 (citing Spec. ¶ 19). Appellants argue their claims, like the claims in *DDR*, are necessarily rooted in computer technology to overcome a problem (limitations of test tools) arising in computer networks (SOA infrastructure for business process verification). App. Br. 14–15 (citing Spec. ¶¶ 5, 19); Reply Br. 11–12.

We are not persuaded the Examiner erred. Notably, many of Appellants' arguments focus on the elements and functions recited in claim 1 that are a part of the abstract idea. As summarized above, Appellants assert various limitations add significantly more because they are more than well-understood, routine, and conventional activities, they are rooted in computer technology, and they improve the technical fields of SOA verification and testing. *See* App. Br. 13–15; Reply Br. 7–12. Appellants' arguments, however, merely summarize or paraphrase the claim language and assert the limitations add significantly more for these reasons, but fail to provide persuasive explanation that the identified limitations are in *addition* to the recited abstract idea or *why* the limitations add significantly more.

An inventive concept “cannot be furnished by the unpatentable law of nature (or natural phenomenon or abstract idea) itself.” *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016); *see also Alice*, 134 S. Ct. at 2355 (explaining that, after determining a claim is directed to a judicial exception, “we then ask, ‘[w]hat else is there in the claims before us?’” (emphasis added, brackets in original) (quoting *Mayo*, 566 U.S. at

78)). Instead, an “inventive concept” is furnished by an element or combination of elements that is recited in the claim *in addition to* the judicial exception and sufficient to ensure the claim as a whole amounts to significantly more than the judicial exception itself. *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at 72–73); see *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) (explaining that the Supreme Court in *Alice* “only assessed whether the claim limitations *other than the invention’s use of the ineligible concept* to which it was directed were well-understood, routine and conventional” emphasis added).

On the other hand, “[i]f a claim’s only ‘inventive concept’ is the application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a patent-eligible application of an abstract idea.” *BSG Tech*, 899 F.3d at 1290–91 (citing *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1370 (Fed. Cir. 2018)). “[I]t is irrelevant whether [the claimed abstract idea] may have been non-routine or unconventional as a factual matter . . . narrowing or reformulating an abstract idea does not add ‘significantly more’ to it.” *BSG Tech*, 899 F.3d at 1291.

We agree with the Examiner that the recited instructions for performing the various steps are part of the abstract idea. Therefore, the question is whether there are *additional* elements recited in the claims that add significantly more to the abstract idea. The claims recite a “CPU,” a “computer readable memory,” “computer readable storage media,” primary and action “agents,” a “service manager,” and a “repository.” However, as stated by the Examiner, these elements are generally and generically recited, and Appellants’ Specification suggests that these are well-known elements

being used as intended and may be comprised of software, hardware, or a combination of software and hardware. *See* Spec. ¶¶ 22–24, 26, 30–32, 36, 43, Figs. 1–2, 4–6. In other words, Appellants’ claims invoke computers merely as tools to obtain, analyze, transmit, collect, aggregate, and consolidate information in a particular way, thereby implementing the abstract idea of verifying a business process. *See BSG Tech*, 899 F.3d at 1286. Simply using generic computers to automate a process does not confer eligibility onto an otherwise abstract idea because it does not improve a computer or technology, but rather improves the process itself. *See Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (explaining that the claimed steps could easily “be carried out in existing computers long in use, no new machinery being necessary”).

Appellants’ arguments that the claims solve a technical problem arising in computer networks and improve the underlying computer or the technical field of SOA infrastructure are unpersuasive. *See* App. Br. 14–15 (citing Spec. ¶¶ 5, 19); Reply Br. 11–12. According to Appellants’ Specification, the problem being solved is one of automating and simplifying business process verification. Spec. ¶¶ 5, 7–9, 19, 22–23, 40, 53–54. Specifically, paragraph 40 discloses that “action agents 300 could be configured to verify a host of other business processes such as, for example, to simulate human actions.” Spec. ¶ 40. Paragraph 53 discloses that “[t]he framework of the present invention also provides a solution for verifying scenarios (functional verification and performance evaluation) that *typically requires manual verification or requires predefined setup of automated testing.*” Spec. ¶ 53 (emphasis added). Using a computer to automate a process does not add significantly more to the abstract idea. *See Intellectual*

Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1370 (Fed. Cir. 2015) (“[O]ur precedent is clear that merely adding computer functionality to increase the speed or efficiency of the process does not confer patent eligibility on an otherwise abstract idea.”).

Appellants argue many of the dependent claims separately but present substantively similar arguments for each group of separately argued claims. App. Br. 15–20; Reply Br. 12–13. Specifically, Appellants merely reproduce or paraphrase the additionally recited limitations and assert, without further explanation, that the additional limitation(s): (1) are not well-understood, routine, and conventional; (2) improve a technology or technical field; and (3) require certain elements (e.g., the recited function or a look-up table), “which include[] meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment.” App. Br. 15–20; Reply Br. 12–13.

The additional limitations recited in the dependent claims simply refine the abstract idea by: further defining the particular information obtained (claims 2, 5, 18, 20) or how information is stored (claims 8, 18) and communicated (claims 11, 18); reciting multiple elements (claims 3, 9); reciting particular element configurations (claim 13); repeating steps (claims 15, 17); and placing conditions on steps (claim 21). These limitations, therefore, are part of the abstract idea and do not provide elements in *addition* to the abstract idea sufficient to transform the claims into eligible subject matter. *See Alice*, 134 S. Ct. at 2355.

Summary of Rejection under 35 U.S.C. § 101

For the above reasons, we determine the Examiner did not err in rejecting claims 1–15 and 17–21 under 35 U.S.C. § 101 as being directed to judicially excepted subject matter.

THE 35 U.S.C. § 103 REJECTIONS

The Examiner finds the combination of Slaughter and Thain teaches or suggests every limitation recited in claims 1–15, 17, and 21 and the combination of Slaughter, Thain, and Todd teaches or suggests every limitation recited in claims 18–20. Final Act. 7–17. Appellants argue independent claim 1 is patentable over the combination of Slaughter and Thain. App. Br. 21–22. Appellants separately argue the patentability of dependent claims 7, 9, 17, and 21 over the combination of Slaughter and Thain and dependent claim 19 over the combination of Slaughter, Thain, and Todd. App. Br. 21–27. Appellants argue dependent claims 2–6, 8, 10–15, 18, and 20 are patentable over the cited combination because each claim ultimately depends from claim 1. App. Br. 26–27.

Rejection of Claim 1

Of particular note with respect to claim 1, the Examiner finds Thain teaches or suggests the “ninth program instructions to invoke a second action agent when it is determined that the business process cannot be completely verified by the action agent which is responsible for the particular verification function,” recited in claim 1. Final Act. 9; Ans. 8. More specifically, the Examiner finds Thain’s probes teach or suggest the recited action agents and Thain discloses using multiple probes to relay data to agent 140, which the Examiner maps to the recited “primary agent.” Final Act. 8–9 (citing Thain ¶¶ 8, 31, 33, 58–61, Fig. 6), 20. The Examiner finds

Thain discloses monitoring extended business transactions, which includes probes that measure information about an application over time and relay the data back to an agent and Thain teaches invoking an additional probe when necessary to monitor the particular extended business transaction. Ans. 8 (citing Thain ¶¶ 4–5, 30, 33, 40, 54, 58–59, 61–62, Fig. 7).

Appellants argue Thain’s probes all “relay data to a single agent 140” and “Thain does not disclose invoking a second action agent when it is determined” the first action agent cannot completely verify the business process. App. Br. 21; Reply Br. 13–14. Appellants also argue Slaughter does not cure the alleged deficiency in Thain. App. Br. 21–22.

The Examiner finds Thain’s agent teaches or suggests the recited primary agent and Thain’s probes teach or suggest the recited action agents. Final Act. 8–9 (citing Thain ¶ 8, 31); Ans. 8.¹ Thus, Appellants’ arguments do not address the Examiner’s findings. Appellants fail to persuasively explain why Thain’s *multiple probes* do not teach or suggest the recited action agents and present no other arguments distinguishing claim 1 from the Examiner’s proposed combination. Thus, we are not persuaded the Examiner erred in rejecting claim 1 as obvious in view of Slaughter and Thain.

Rejection of Claim 7

The Examiner finds Slaughter teaches a service manager “configured to de-couple the one or more primary agents from the one or more action agents,” as recited in claim 7. Final Act. 12 (citing Slaughter 16:18–30); Ans. 9 (additionally citing Slaughter 16:31–55, 17:21–50). Appellants argue

¹ Although the Examiner does not find Thain’s agent teaches the recited action agents, we note Thain discloses multiple agents. See Thain ¶ 62.

Slaughter is directed to searching for documents in a distributed computing environment and the cited sections of Slaughter simply teach “a take method . . . to return an object and remove it from space” and a distributed computing model combining a messaging system with XML messages and object representations. App. Br. 22; Reply Br. 15.

We agree with the Examiner that Slaughter discloses separating clients from the services. *See* Slaughter 16:50–55. Slaughter also discloses separating clients, services, and a “space server.” *See* Slaughter 17:43–48 (“clients 110 and services 112 may or may not reside within the same network device . . . no particular platform is required for the devices to support the clients and services”). We agree with the Examiner that Slaughter’s disclosure of separating the clients and services teaches de-coupling the clients and services. The rejection of claim 7 is based on a combination of Slaughter and Thain. Specifically the Examiner finds Slaughter teaches de-coupling services and clients, and Thain teaches the recited primary and action agents. Thus, it is the combination of Slaughter and Thain that teaches the recited function of de-coupling the primary and action agents.

Appellants present no other arguments distinguishing claim 7 from the Examiner’s proposed combination. For the above reasons, we agree with the Examiner’s findings and conclusion that claim 7 would have been obvious in view of Slaughter and Thain.

Rejection of Claim 9

The Examiner finds Slaughter teaches adding agents or new business processes without disrupting an existing test run. Final Act. 12 (citing Slaughter 16:18–30); Ans. 7. Appellants argue Slaughter’s disclosed write

method provided by a messaging layer that may translate an object into an XML representation does not teach adding agents or a business process. App. Br. 23; Reply Br. 15.

We agree with Appellants that Slaughter’s cited disclosure does not teach or suggest adding “at least one of a new primary agent, new action agent and new business processes,” as recited in claim 9. As Appellants argue, Slaughter’s cited portion merely discloses using a messaging layer to add, find, or retrieve and remove XML representations of an object to a space. *See* Slaughter 16:18–30. Slaughter discloses that spaces may be “object repositories” or a location for content in a distributed computing environment and, more specifically, “a space may be a repository of XML advertisements of services and/or XML data, which may be raw data or advertisements for data, such as results.” Slaughter 7:65–8:11.

The Examiner has not explained how Slaughter’s disclosure of using a message-passing layer to manage objects in a space teaches or suggests adding a new agent or business process.² To the extent the Examiner finds the cited disclosures simply teach adding and removing objects from a repository, the Examiner has not sufficiently explained either (1) how the cited disclosure would be combined with the other cited disclosures in Slaughter and/or Thain to teach the disputed limitation or (2) provided a sufficient reason a person of ordinary skill in the art would have modified or combined the cited disclosure to arrive at the disputed limitation.

² Should this matter undergo further prosecution, we leave to the Examiner to determine whether Thain’s disclosure of “add[ing] code for one or more agents and probes to the application” would teach or suggest the limitations recited in claim 9 and whether it would have been obvious to combine this teaching with the Examiner’s proposed combination. Thain ¶ 62.

For the above reasons, we are persuaded the Examiner erred in rejecting claim 9 as obvious in view of the combination of Slaughter and Thain.

Rejection of Claim 17

The Examiner finds Thain teaches a complex business processes comprising more than two processes that cannot be verified by a single agent because Thain discloses using multiple probes to monitor an extended business process over time. Final Act. 14–15 (citing Thain ¶¶ 31, 33, 58–61; Fig. 6); Ans. 9 (additionally citing Thain ¶ 62 and referring to claim 1 analysis). Similar to the arguments regarding claim 1, Appellants argue Thain only discloses a single agent and therefore cannot disclose “a complex business process . . . that cannot be verified by a single action agent.” App. Br. 24; Reply Br. 16.

For the same reasons discussed above with respect to claim 1, we are not persuaded the Examiner erred in rejecting claim 17. Specifically, the Examiner finds Thain discloses using multiple probes to monitor an extended business practice. Final Act. 14–15. The Examiner finds Thain’s probes, not Thain’s agent, teach or suggest the recited action agents. *See* Final Act. 8. Regardless of whether Thain uses multiple agents, which the Examiner finds teach the recited primary agent, Thain explicitly discloses using multiple probes to monitor a process. Thus, Appellants’ arguments do not address the Examiner’s findings. Appellants have not persuasively explained why Thain’s disclosure of monitoring an extended business process using multiple probes fails to teach or suggest the recited complex business process that cannot be verified by a single action agent. Appellants present no other arguments distinguishing claim 17 from the Examiner’s

proposed combination. Thus, we agree with the Examiner’s findings and conclusion that claim 17 would have been obvious in view of Slaughter and Thain.

Rejection of Claim 19

The Examiner finds Slaughter teaches verifying the business processes is “part of a test phase for” a SOA quality assurance program. Final Act. 17 (citing Slaughter 16:31–55); Ans. 9–10 (additionally citing Thain ¶¶ 26, 55–56). Appellants argue Slaughter provides a search facility and Thain monitors managed applications using probes and alerts based on exceeding time thresholds without receiving a message, but neither Slaughter nor Thain discloses performing these functions as part of a test phase. App. Br. 26–27; Reply Br. 16.

Claim 19’s recitation that the verifying instruction “a part of a test phase for a service oriented architecture (SOA) quality assurance program” is merely an intended use of the instruction. It is well settled that the recitation of a new intended use for an old product does not make a claim to that old product patentable. *See In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990) (“The discovery of a new property or use of a previously known composition, even when that property and use are unobvious from prior art, can not impart patentability to claims to the known composition.”); *see also In re Sinex*, 309 F.2d 488, 492 (CCPA 1962) (statement of intended use in an apparatus claim failed to distinguish over the prior art apparatus); *In re Hack*, 245 F.2d 246, 248 (CCPA 1957) (“the grant of a patent on a composition or machine cannot be predicated on a new use of that machine or composition”); *In re Benner*, 174 F.2d 938, 942 (CCPA 1949) (“no

provision has been made in the patent statutes for granting a patent upon an old product based solely upon discovery of a new use for such product”).

For the above reasons, we are not persuaded the Examiner erred in rejecting claim 19 as obvious in view of the combination of Slaughter, Thain, and Todd.

Rejection of Claim 21

The Examiner finds Thain teaches verifying the business processes “without performing playback of the business process” because Thain discloses agents that measures information without changing the business logic. Final Act. 15 (citing Thain ¶ 31); Ans. 7 (explaining the application still runs while performing the verification). Appellants argue that, although Thain’s probes, installed in application bytecode, measure specific information without changing business logic, Thain does not teach “the action agent verifies logic of the particular business process without performing playback of the business process.” App. Br. 25; Reply Br. 16–17.

Appellants assert Thain’s disclosure “is different from” the recited limitation, but does not persuasively explain *why* Thain’s disclosure fails to teach or suggest the recited limitation. Specifically, claim 21 merely adds the requirement that verification performed by the action agent, as recited in claim 1, is done “without performing playback of the business process.” Appellants do not present a construction of “performing playback of the business process,” or any other argument, demonstrating Thain teaches performing the verification function only *with* (or while) performing playback of the business process. We see nothing in the cited portions of

Thain to suggest that Thain requires playback of a business process to monitor the extended business processes.

For these reasons, we are not persuaded the Examiner erred in rejecting claim 21 as obvious in view of the combination of Slaughter and Thain.

Rejection of Claims 2–6, 8, 10–15, 18, and 20

As explained above, Appellants do not argue the patentability of claims 2–6, 8, 10–15, 18, and 20 separately with particularity. Accordingly, for the reasons discussed above, we are not persuaded the Examiner erred in rejecting claims 2–6, 8, and 10–15 as obvious in view of the combination of Slaughter and Thain and claims 18 and 20 as obvious in view of the combination of Slaughter, Thain, and Todd.

Summary of Rejections under 35 U.S.C. § 103

For the above reasons, we determine the Examiner did not err in rejecting claims 1–8, 10–15, and 17–21 under 35 U.S.C. § 103, but the Examiner did err in rejecting claim 9 under 35 U.S.C. § 103.

SUMMARY

We affirm the Examiner’s decision to reject claims 1–15 and 17–21 under 35 U.S.C. § 101.

We affirm the Examiner’s decision to reject claims 1–8, 10–15, and 17–21 under 35 U.S.C. § 103.

We reverse the Examiner’s decision to reject claim 9 under 35 U.S.C. § 103.

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DECISION

Because we affirm at least one ground of rejection with respect to each claim on appeal, the Examiner's decision to reject claims 1–15 and 17–21 is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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).

AFFIRMED