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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANIS CHARFI, ALISTAIR BARROS,
UWE KYLAU, and HEIKO WITTEBORG

Appeal 2016-004195
Application 13/324,369
Technology Center 3600

Before HUNG H. BUI, JOSEPH P. LENTIVECH, and
KARA L. SZPONDOWSKI, *Administrative Patent Judges*.

SZPONDOWSKI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants[1] appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–19. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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[1] Appellants identify SAP SE as the real party in interest (App. Br. 4).

STATEMENT OF THE CASE

Appellants' invention is directed to a model and system for service provisioning lifecycle management for provisioning services in business networks. Spec. ¶ 3. Claim 1, reproduced below with the disputed limitations in *italics*, is representative of the claimed subject matter:

> 1. A computer-implemented method for lifecycle management of services provisioned in a business network, the method being executed using one or more processors and comprising:
>
> defining a service package associated with a service, the service being accessible in the business network, and the service package being a logical representation of the service and comprising a plurality of artifacts, the service being provided by a service provider;
>
> storing the service package in computer-readable memory;
>
> defining a service lifecycle model associated with the service, the service lifecycle model comprising a plurality of states and a plurality of provisioning activities related to provisioning the service into the business network, *the service lifecycle model enabling the service to be exposed from an internal environment associated with the service provider into the business network, the plurality of provisioning activities including delivery and consumption of the service in the business network subsequent to creation and testing of the service and involving one or more provisioning partners of the business network for interacting with the service after the creation and testing of the service*;
>
> storing the service lifecycle model in the computer-readable memory;

determining that the service is in a first state, the first state being associated with one or more user roles, each use role being associated with one or more artifacts of the plurality of artifacts;

determining that a first set of provisioning activities of the plurality of provisioning activities has occurred, the first set of provisioning activities comprising activities performed on the one or more artifacts subsequent to the creation and testing of the service;

in response to determining that the first set of provisioning activities has occurred, transitioning the service lifecycle model from the first state to a second state; and

updating the service lifecycle model in the computer readable memory.

REJECTIONS & REFERENCES

(1) Claims 1–19 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

(2) Claims 1–5, 6–12, 15, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Westerinen et al. (US 7,065,740 B2; issued June 20, 2006) ("Westerinen") and Du et al. (US 2011/0107302 A1; published May 5, 2011) ("Du").

(3) Claims 13 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Westerinen, Du, and Eidt et al. (US 2010/0036751 A1; published Feb. 11, 2010) ("Eidt").

(4) Claims 17–19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Westerinen, Du, and Mukherjee et al. (US 5,317,729; issued May 31, 1994) ("Mukherjee").

ANALYSIS

35 U.S.C. § 101 Rejection

Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014), identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent eligibility under 35 U.S.C. § 101. In the first step, "[w]e must first determine whether the claims at issue are directed to a patent-ineligible concept." *Alice*, 134 S. Ct. at 2355.

The Examiner concludes the claims are directed to the abstract idea of "organizing human activity in a product servicing scheme." Final Act. 2; Ans. 15.

Appellants argue "[t]he Specification of the instant application is devoid of any discussion of 'organizing human activity' as a product servicing scheme." App. Br. 12. Appellants argue the claims "necessitate[] an underlying computing device" and, therefore, "cannot be correctly characterized as 'organizing human activities.'" Reply Br. 1–2. Appellants further argue "the final Office action does not substantiate this characterization with any evidence," App. Br. 12, and "the Examiner's Answer has ignored particular claim language and over-generalized the subject matter of the claims." Reply Br. 2.

We are not persuaded by Appellants' arguments. Claim 1 recites a method comprising (1) defining a service package, (2) storing the service package, (3) defining a service lifecycle model associated with the service, (4) storing the service lifecycle model, (5) determining that the service is in a first state, (6) determining that a first set of provisioning activities of the plurality of provisioning activities has occurred, (7) in response to determining that the first set of provisioning activities has occurred,

transitioning the service lifecycle model from the first state to a second state, and (8) updating the service lifecycle model. Independent claims 15 and 16 recite similar limitations.

We agree with the Examiner that the claims are directed to organizing human activity, namely, a product servicing scheme, which is an abstract idea. *See, e.g.*, *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) (characterizing collecting information, analyzing information by steps people go through in their minds, or by mathematical algorithms, and presenting the results of collecting and analyzing information, without more, as matters within the realm of abstract ideas); *Content Extraction & Transmission v. Wells Fargo Bank*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (finding claims for extracting data from documents, recognizing specific information, and storing that information in memory in automated teller machines (ATM) were directed to patent-ineligible abstract ideas); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1354–55 (Fed. Cir. 2014) (finding claims for guaranteeing a party's performance of its online transaction were directed to the abstract idea of "creating a contractual relationship"); *Accenture Global Services, BmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344 (Fed. Cir. 2013) (finding claims for generating tasks to be performed in an insurance organization were directed to the abstract idea of "generating tasks [based on] rules . . . to be completed upon the occurrence of an event" (alteration in original)).

Further, we are not persuaded by the Appellants' argument that the claims are not directed to an idea itself, but rather necessitate an underlying computer device. Our reviewing court has found that if a method can be performed by human thought, these processes remain unpatentable even

when automated to reduce burden to the user. *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) ("That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*, [409 U.S. 63 (1972)].").

In the second step of the *Alice* analysis, 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." *Alice*, 134 S. Ct. at 2355 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78–79 (2012)). In other words, the second step is to "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.* (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

Appellants argue "each of claims 1, 15 and 16 include one or more elements, or combination of elements, that are sufficient to ensure that claims 1, 15 and 16 amount to significantly more than an abstract idea itself." App. Br. 12. Appellants further argue "none of claims 1, 15 and 16 attempts to preempt all uses of the any alleged abstract idea." *Id.* Finally, Appellants argue "the subject matter of claims 1, 15 and 16 is rooted in computer technology in order to overcome problems specifically arising in the realm of lifecycle management for provisioning services in global business networks." App. Br. 12–13 (citing *DDR Holdings, LLC v. Hotels.com, LP*, 773 F.3d 1245 (Fed. Cir. 2014)); *see also* Reply Br. 3–4.

We are not persuaded by the Appellants' arguments that the claims represent "significantly more" than the abstract idea exception. We agree with the Examiner's findings that "[t]he additional elements or combination of elements in the claims other than the abstract idea per se amounts to no more than a mere instruction to implement the idea on a computer." Final Act. 7. Appellants do not direct us to, nor do we discern, any indication in the record that any specialized computer hardware or other "inventive" computer components are required. *See, e.g.*, Spec. ¶¶ 22–24, 89–92, Fig. 1, 2, 10. Rather than reciting additional elements that amount to "significantly more" than the abstract idea, the pending claims, at best, add only a "computer readable memory," "processing devices," and/or "computing devices," i.e., generic components, which do not satisfy the inventive concept. *See, e.g.*, *DDR*, 773 F.3d at 1256 ("[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible. The bare fact that a computer exists in the physical rather than purely conceptual realm 'is beside the point.'" (citation omitted)).

The claims are also distinguishable from those in *DDR*. In *DDR*, the Federal Circuit found that the challenged claims were valid because they "specif[ied] how interactions with the Internet are manipulated to yield a desired result–a result that overrides the routine and conventional" aspects of the technology. *DDR*, 773 F.3d at 1258–59. Here, we do not discern that these claims "stand apart," like those in *DDR* because they merely recite the performance of some business practice known from the pre-Internet world, along with the requirement to perform it on the Internet. *See DDR*, 773 F.3d at 1257. In other words, Appellants have not demonstrated their claimed

generic computer components are able in combination to perform *functions that are not merely generic*, as the claims in *DDR*.

Appellants' preemption argument is also unpersuasive of Examiner error. *See Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) ("Where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot."); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) ("[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.").

The claims when viewed as whole are nothing more than performing conventional processing functions that courts have routinely found insignificant to transform an abstract idea into a patent-eligible invention. As such, the claims amount to nothing significantly more than an instruction to implement the abstract idea on a generic computer—which is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2360.

Accordingly, we are not persuaded the Examiner erred in finding claims 1–19 directed to nonstatutory subject matter. Therefore, we sustain the Examiner's 35 U.S.C. § 101 rejection of claims 1–19.

35 U.S.C. § 103(a) Rejections

Issue: Did the Examiner err in finding the combination of Westerinen and Du teaches or suggests "the service lifecycle model enabling the service to be exposed from an internal environment associated with the service

provider into the business network, the plurality of provisioning activities including delivery and consumption of the service in the business network subsequent to creation and testing of the service and involving one or more provisioning partners of the business network for interacting with the service after the creation and testing of the service," as recited in independent claim 1 and commensurately recited in independent claims 15 and 16?

Appellants argue "the activities of Westerinen, including creating a new image, upgrading an image or monitoring, management, and maintenance tasks are different than, the plurality of provisioning activities including delivery and consumption of the service in the business network subsequent to creation and testing of the service." App. Br. 15. According to Appellants, "the cited portions of Westerinen are silent as to testing of the service and involving one or more provisioning partners of the business network for interacting with the service after the creation and testing of the service." App. Br. 15–16.

We are not persuaded by Appellants' arguments and agree with the Examiner's findings. *See* Ans. 19–21. The Examiner relies on Westerinen to teach or suggest the disputed limitation. Final Act. 9; Ans. 19–21. Westerinen describes "an apparatus and method to automate the deployment, provisioning, and management of a programmable device for the life cycle states of the programmable device." Westerinen, Abstract. Westerinen further describes that "there can be any number of states in the lifecycle of a function," such as, for example, untested, tested, undeployed, deployed, and provisioned states. *Id*. at col. 8, ll. 1–12; *see* Figs. 3a and 3b. A controller initiates a transition from one state to another in response to receiving a triggering event, which may be, *inter alia*, manually entered by a user or

automated. *Id.* at col. 8, ll. 21–34. Although Westerinen describes many examples of transitions from state to state (*see, e.g.*, Figs. 4–8 and associated description), as particularly pertinent to Appellants' claims, Westerinen describes transition "from the untested state **202** to tested state **204** occurs when a new function **22** is being developed and tested[.]" *Id.* at col. 8, ll. 38–40; *see also* col. 8, l. 54–col. 9, l. 25. Certain tasks are also performed, such as "building any programmable devices required to carry out the service and performance testing the programmable devices . . . upgrading an image or creating a new image and testing the upgraded or new image." *Id.* at col. 8, ll. 44–53. After the various tasks are performed (*see* col. 8, l. 25–col. 9, l. 58), the controller may also initiate the transition to the deployed, prepped, or provisioned states. *Id.* at col. 9, l. 59–11, l. 50. In addition, Westerinen's system "has an automation interface **26** that enables OEMs, service providers, and other developers to develop modules that are used to trigger the controller **24** to transition the function **22** from one lifecycle state to another." *Id.* at col. 4, ll. 23–27.

Appellants have not sufficiently explained why Westerinen does not teach or suggest the disputed limitations. For example, Appellants argue "the activities of Westerinen, including creating a new image, upgrading an image or monitoring, management, and maintenance tasks are different than, the plurality of provisioning activities including delivery and consumption of the service in the business network subsequent to creation and testing of the service," without any explanation as to why they are different. As described *supra*, Westerinen teaches development and testing of a service, as well as deployment and provisioning of that service subsequent to the development and testing. *See, e.g., id.* at Fig. 3a, col. 8, l. 35–9, l. 61. Moreover,

Appellants' argument that "the cited portions of Westerinen are silent as to testing of the service" is unpersuasive because Westerinen explicitly discusses testing. *E.g.*, *id.*, Fig. 4, col. 8, ll. 38–40 ("The triggering event to transition from the untested state **202** to tested state **204** occurs when a new function **22** is being developed and tested.").

Appellants' argument that "the cited portions of Westerinen are silent as to . . . involving one or more provisioning partners of the business network for interacting with the service after the creation and testing of the service" is also not persuasive. Westerinen describes "an automation interface **26** that enables OEMs, service providers, and other developers to develop modules that are used to trigger the controller **24** to transition the function **22** from one lifecycle state to another." *Id.* at col. 4, ll. 22–27. "The modules may include, by way of example, policy and management applications **28**, controller scripts **30**, and web and wireless user interfaces 32." *Id.* at col. 4, ll. 28–29; *see also* col. 4, ll. 30–38. Such applications, scripts and functionality are described throughout Westerinen. *E.g.*, *id.* at col. 10, l. 39–12, l. 53.

Appellants further argue "modifying Westerinen in view of Du would render Westerinen unsatisfactory for its intended purpose." App. Br. 17. According to Appellants, "there is no suggestion nor motivation to make the proposed modification" because "starting from Westerinen as the primary reference, one would not have looked to Du for improvement because Du provides that <u>authorized users execute transitions between states</u> (e.g., administrators define and create the service and transfer it to designers), which is contrary to Westerinen's intended purposes." *Id.* at 16.

We are not persuaded. Although Westerinen describes an automated process, a user may manually enter the triggering event received by the controller to initiate a transition from one state to another. Westerinen, col. 8, ll. 21–34. In other words, the user will still determine *when* a transition from one state to another state should occur, even though the transition itself is automated by the controller. Moreover, the Examiner relies on Du to teach "the first state being associated with one or more user roles, each use[r] role being associated with one or more artifacts of the plurality of artifacts." Ans. 21 (citing Du ¶¶ 52–59). We agree with the Examiner that modifying Westerinen with Du would "yield a predictable result of associating users with various stages of a service lifecycle." Ans. 21.

Accordingly, we are not persuaded the Examiner erred in rejecting independent claims 1, 15, and 16 over the combination of Westerinen and Du, and we, therefore, sustain those rejections. For the same reasons, we sustain the Examiner's rejections of dependent claims 2–14 and 17–19, which were not separately argued. *See* App. Br. 17–18.

DECISION

The Examiner's 35 U.S.C. § 101 rejection of claims 1–19 is affirmed.

The Examiner's 35 U.S.C. § 103(a) rejection of claims 1–19 is affirmed.

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