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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SRIDHAR PALAKURTHY

Appeal 2020-000485
Application 13/770,952
Technology Center 3600

Before DONALD E. ADAMS, ULRIKE W. JENKS, and
TAWEN CHANG, *Administrative Patent Judges.*

CHANG, *Administrative Patent Judge.*

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 1, 32, 33, 35, 36, 38, 39, 41, 42, 44, 45, 47, and 48.[2] We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

STATEMENT OF THE CASE

The Specification states that "more recently cloud based data storage has become accessible to users where databases and/or other resources associated therewith may be shared amongst users of various companies, organizations, etc.," but that, "[i]n general, [] electronic-based advertising has not yet been integrated as a service with such cloud based data storage system." Spec. ¶ 5. According to the Specification, the instant disclosures "provide[] mechanisms and methods for advertisement distribution using a multi-tenant on-demand database system," which "enable the distribution of

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[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Salesforce.com, Inc. Appeal Br. 3.

[2] Appellant states in the Claim Appendix to the Appeal Brief that "claims 1, 32–34, 36–39, 41–45, [and] 47–49" are on appeal. Appeal Br. 26 (Claims App.). However, claims 34, 37, and 49 have been cancelled. *See* Response to Office Action (Jan. 18, 2019); Final Act. 1 (Feb. 26, 2019). In addition, although Appellant does not include pending claim 35 in the listing above, the text of claim 35 is reproduced in the Claims Appendix. We also note that, while the text of pending claim 48 is not reproduced in the Claims Appendix, it is included in the list of claims on appeal. We therefore understand that claims on appeal to be 1, 32, 33, 35, 36, 38, 39, 41, 42, 44, 45, 47, and 48.

advertisements to take advantage of other data stored by and/or services provided by the multi-tenant on-demand database system." *Id.* ¶ 7.

CLAIMED SUBJECT MATTER

The claims are directed to a non-transitory computer-readable medium, method, or system relating to storing content for a plurality of tenants. Claim 1 is illustrative:

> 1. A non-transitory computer-readable medium having computer instructions stored thereon that are capable of being executed by a computer system to cause operations comprising:
>
> [(a)] storing, by a multi-tenant database system, content for a plurality of tenants, wherein the content is stored using at least one shared database table that includes one or more rows for each of multiple tenants, wherein the database system is configured such that private content of one tenant is not accessible to other tenants;
>
> [(b)] storing, by the multi-tenant database system, a first set of supplemental content of a first type that is accessible to multiple ones of the plurality of tenants;
>
> [(c)] storing, by the multi-tenant database system, a second set of supplemental content of a second type that is tenant-specific such that portions of the second set of supplemental content corresponding to various ones of the plurality of tenants are not accessible to other ones of the plurality of tenants;
>
> [(d)] receiving information from a first tenant that indicates properties of supplemental content to be provided in response to requests for content of the first tenant, including indicating to provide the first type of supplemental content with content of the first tenant;

> [(e)] receiving information from a second tenant that indicates properties of supplemental content to be provided in response to requests for content of the second tenant, including indicating to provide the second type of supplemental content and not the first type of supplemental content with content of the second tenant;
>
> [(f)] storing the information from the first and second tenants;
>
> [(g)] in response to respective requests for content of the first and second tenants, a first module of the multi-tenant database system retrieving content from the at least one shared database table;
>
> [(h)] in response to detecting that the requested content includes a widget that specifies supplemental content, a second module determining supplemental content based on the stored information from the first and second tenants, including:
>
> [(i)] determining to distribute content from the first set of supplemental content for the first tenant based on the information from the first tenant; and
>
> [(j)] determining to distribute only content from the second set of supplemental content in response to the request for content of the second tenant based on the information from the second tenant; and
>
> [(k)] automatically providing the determined supplemental content for the first and second tenants with the retrieved content in response to the requests, thereby securing supplemental content of the second tenant in the second set of supplemental content from being accessed by other ones of the tenants and thereby ensuring that supplemental content from other tenants is not provided with content of the second tenant.

Appeal Br. 26–27 (Claims App.) (annotations added).

REJECTIONS[3]

A. Claims 1, 32, 33, 36, 38, 39, 41, 42, 44, 45, 47, and 48[4] are rejected under pre-AIA 35U.S.C. § 103(a) as being unpatentable over Grewal[5] and Mercuri.[6] Ans. 4.

B. Claim 35 is rejected under pre-AIA 35U.S.C. § 103(a) as being unpatentable over Grewal, Mercuri, and Warshavsky.[7] Ans. 20.

OPINION

A. Issues

The same issues are dispositive for the obviousness rejections over Grewal and Mercuri and over Grewal, Mercuri, and Warshavsky. We therefore discuss these rejections together.

The Examiner finds that Grewal discloses almost all of the limitations of claim 1, except that it does not explicitly disclose "a first tenant, a second

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[3] In the Answer, the Examiner refers us to the analysis regarding patent subject matter eligibility under 35 U.S.C. § 101 in a Non-Final Office Action mailed November 7, 2018. Ans. 3. We acknowledge that the Examiner found the claims to be patent eligible under 35 U.S.C. § 101 in her analysis.

[4] The Examiner states in the Answer that claims 1, 32–34, 36–39, 41, 42, 44, 45, 47, and 48 are rejected as obvious over Grewal and Mercuri. However, as acknowledged in the Final Rejection, claims 34 and 37 have been cancelled. *See* Final Act. 1; *see also* Response to Office Action (filed Jan. 18, 2019).

[5] Grewal et al., US 2008/0270459 A1, published Oct. 30, 2008 (hereinafter "Grewal").

[6] Mercuri et al., US 2011/0238688 A1, published Sept. 29, 2011 (hereinafter "Mercuri").

[7] Warshavsky et al., US 2011/0218958 A1, published Sept. 8, 2011 (hereinafter "Warshavsky").

tenant, etc.," or "a widget that specifies supplemental content." Ans. 9, 15–16.

With respect to the limitation regarding a first and a second tenant, the Examiner finds that Grewal "discloses functionality that is performed by [its] system for a tenant" and further concludes that "mere duplication of parts or functionality" — e.g., inclusion of a second tenant in Grewal's system — "has no patentable significance unless a new and unexpected result is produced." Ans. 9, 15.

The Examiner also finds that Mercuri teaches an embodiment of a content distribution system, wherein "'a publisher **may embed a widget on a web page** of the publisher that, **upon preparation for display (such as when a user visits the web page), requests content** . . . **from a content store** where an author has previously stored content.'" Ans. 16 (emphasis in original). The Examiner interprets the widget described in Mercuri as meeting the limitation in claim 1 of "a widget that specifies supplemental content" and concludes that it would have been obvious to a skilled artisan to incorporate Mercuri's widget into Grewal's application "in order to respond in a timely way to requests for online content from users." *Id.*

Finally, although the Examiner cites portions of Grewal as meeting the limitations (d), (e), (g), and (h) in claim 1, the Examiner concludes that these steps contain various limitations that are not positively recited "given the broadest reasonable interpretation to the claim," and further concludes that limitations (g) and (h) may also have "an antecedent basis problem." Ans. 8, 9–12.

Appellant argues that the cited prior art combination does not teach "the supplemental content or information of claim 1." Appeal Br. 17.

Accordingly, Appellant contends that the cited prior art combination also "does not teach or suggest features relating to distributing different 'supplemental content' that is 'tenant-specific' or 'accessible to multiple' tenants, much less 'information' that 'indicates properties of supplemental content to be provided in response to request for content of' different tenants." *Id.*

The issue with respect to these rejections is whether a preponderance of the evidence supports the Examiner's conclusion that the claims on appeal are obvious over the cited combinations of prior art.

B. Analysis

We find Appellant to have the better arguments in this case.

Grewal teaches "a hosted multi-tenant application that utilizes per-tenant unshared private databases"; "a middle tier . . . shared by the tenants" that "represents the software and hardware components that provide the hosted application to the tenants"; and a "shared configuration database" that "stores application data that is shared among the tenants."[8] *See, e.g.,* Grewal ¶¶ 5–8.

Grewal teaches that "the server computers utilized to provide the hosted application may be organized into scale groups," i.e., "a logical grouping of servers" that "[e]ach . . . includes a shared middle-tier and a

[8] "A hosted application is a software application where the software resides on servers that are accessed through a wide-area network, such as the Internet, rather than more traditional software that is installed on a local server or on individual client computers." Grewal ¶ 1.

database-tier for supporting the tenants assigned to the scale group." Grewal ¶ 9. Grewal teaches that

> [a]n association between the tenant and the scale group is . . . created in the shared configuration database. When a request is received from a tenant to access the hosted application, the shared configuration database is consulted to locate the scale group hosting the private, unshared database for the tenant. Once the appropriate scale group has been located, the request is redirected to the middle-tier in the appropriate scale group for processing."

Id. ¶¶ 9, 28, 35–37, Fig. 4. Grewal teaches that, "[o]nce the appropriate scale group database server **214** has been identified, a connection is made to the identified database server **214** to obtain any private tenant data necessary to respond to the incoming request," and "the data is utilized to respond to the incoming tenant request." *Id.* ¶ 37.

The Examiner relies on Grewal for all of the limitations of claim 1 except for the limitation regarding "widget that specifies supplemental content." Ans. 15–16. The Examiner cites Mercuri as disclosing that limitation.

We agree with Appellant that the Examiner has not established a prima facie case that claim 1 is obvious over the combination of Grewal and Mercuri, at least because the Examiner has not shown that the cited combination of prior art teaches or suggests limitation (k), regarding "automatically providing the determined supplemental content for the first and second tenants with the retrieved content in response to the requests" for content of the first and second tenants.

For disclosure of limitation (k) in the prior art, the Examiner cites to the following disclosure from Grewal:

> ("...A method for providing a hosted application to **a plurality of tenants,** the method comprising: receiving a request for the hosted application from one of the plurality of tenants; **in response to the request, locating a private unshared database** associated with the one of the plurality of tenants; and **responding to the request for the hosted application utilizing data stored in the identified private unshared database ....",** claim 8, see also Fig. 4 and associated disclosure).

Ans. 15.

The cited passage discusses respond to a tenant's request using data stored in the tenant's *private* unshared database. Assuming for the sake of argument that any data stored in a tenant's private unshared database may be considered to meet the limitation of "a second set of supplement data" because they are tenant-specific and not accessible to other tenants, the Examiner still has not explained how the cited passage discloses or renders obvious "automatically providing the determined supplement content for the *first* . . . tenant with the retrieved content in response to the requests," given that earlier limitation (i) recites "determining to distribute content from the *first* set of supplement content," i.e., content that is accessible to multiple ones of the plurality of the tenants, "for the first tenant."

In response to similar arguments in the Appeal Brief, the Examiner notes that no special definition is provided for the term "distribute" and that "the term 'supplemental content[] is not mentioned in the instant specification." Ans. 22. The Examiner states that, therefore, these terms are given their "broadest reasonable interpretation in light of the specification and in view of one skilled in the art." *Id.*

Although we agree that the Specification does not use the term "supplemental content" and that claim term should be given their broadest reasonable interpretation in light of the Specification, the Examiner has not provided her construction of either "distribute" or "supplemental data." It is not clear, even under the broadest reasonable interpretation of either "distribute" or "supplemental content," how the passage in Grewal cited by the Examiner renders obvious providing supplemental content that is *accessible to multiple ones of a plurality of the tenants* (i.e., "first set of supplemental content"), given that the cited passage explicitly states that it is data stored in the *private unshared* database that is used to respond to the request.

The Examiner next points out that Grewal teaches a shared configuration database that "stores application data that is shared among the tenants," which the Examiner interprets as "content of a first type that is accessible to multiple ones of a plurality of the tenants." Ans. 23. The Examiner notes that Grewal teaches (1) using data in the shared configuration database to identify the scale group and server associated with the tenant when a tenant request to access the hosted application is received and (2) redirecting the request to the identified scale group. *Id.* at 22. The Examiner asserts that these teachings are interpreted as "determining to distribute content from the first set of supplemental content for the first tenant," as recited in claim 1. *Id.* The Examiner similarly notes that Grewal teaches making connection to the identified server (i.e., the server maintaining the tenant's unshared organization database), obtaining any private tenant data necessary to respond to the incoming request, and using the data to respond. *Id.* at 22–23. The Examiner asserts that these teachings

are interpreted as distributing the first set of supplemental content for the first tenant.[9] *Id.* at 22–23.

We are not persuaded. Although Grewal teaches data that is shared among multiple tenants, and even assuming that all such content may be interpreted as "the first set of supplemental content," the Examiner has not shown how such shared content is "automatically provid[ed] . . . for the first . . . tenant[] with the retrieved content in response to [a] request[]," as recited in claim 1. Instead, at least in the passages cited by the Examiner, the shared content is used only to locate the *private* tenant data used to respond to the request.

The Examiner asserts that "it is not an accurate allegation" that "*all the disclosed 'application data' for a given tenant that is actually distributed by Grewal in response to requests appears to be tenant-specific and unshared with other tenants*," because Grewal explicitly discloses that the shared configuration database stores application data that is shared among the tenants. Ans. 24–25. Nevertheless, the Examiner has not cited to any disclosure in Grewal that *such shared data is provided in response to a tenant request*. To the extent the Examiner's position is that it would have been obvious to a skilled artisan that such shared data may be provided, or would have been inherently provided, with the retrieved private content in response to a request, the Examiner has not sufficiently articulated her reasoning. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (*quoting In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)) ("[R]ejections on

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[9] We note that the element (k) requires "providing" the determined supplemental content, rather than "distributing" such content. However, our analysis is not changed based on this difference in wording.

obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

Finally, in the Answer, the Examiner appears to assert that limitations relating to actions take “in response to . . . request for content” are contingent limitations. Ans. 11, 12. We address this issue here because, although the Examiner does not explicitly raise this issue with respect to limitation (k), on which we base our reversal, limitation (k) contains similar language in that it recites “automatically providing the determined supplemental content for the first and second tenants with the retrieved content *in response to the requests*.”

We are not persuaded by the Examiner’s position. As an initial matter, independent claims 1 and 45 are claims relating to computer-readable medium and a system, respectively. Assuming that a request is a “condition precedent” for limitations (g) through (k), “[t]he broadest reasonable interpretation of a system claim having structure that performs a function, which only needs to occur if a condition precedent is met, still requires structure for performing the function should the condition occur.” *Ex parte Schulhauser*, No. 2013-007848, 2016 WL 6277792, at *7 (PTAB Apr. 28, 2016) (precedential).

We next address claim 39, which is a method claim. We agree that “[t]he broadest reasonable interpretation of a method (or process) claim having contingent limitations requires only those steps that must be performed and does not include steps that are not required to be performed because the condition(s) precedent are not met.” MPEP § 2111.04. However, we are not persuaded by the Examiner’s argument because we

conclude that a skilled artisan, considering the claim in the context of the Specification as a whole, would interpret the claim to be limited to a method in which requests for content of both the first and second tenants are received. Unlike the method claim in *Schulhauser*, claim 39 is not drafted in such a way that two steps have prerequisite conditions that are mutually exclusive. *Schulhauser*, 2016 WL 6277792, at *3–*4 (describing claim comprising steps of "comparing the electrocardiac signal data with a threshold" and either "determining the current activity level of the subject" or "triggering an alarm" depending on whether the electrocardiac signal data is or is not within the threshold).

Accordingly, we reverse the Examiner's rejection of claim 1 as obvious over Grewal and Mercuri. Claims 39 and 45, the only other independent claims, contain limitations similar to that discussed above for claim 1, and we reverse the rejection of those claims for the same reasons. We also reverse the rejections of claims 32, 33, 36, 38, 41, 42, 44, 47, and 48, which each depend from claims 1, 39, or 45. *In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988) ("Dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious.").

The Examiner rejects claim 35 as obvious over Grewal, Mercuri, and Warshavsky. However, the Examiner cites Warshavsky only for the dependent limitation, "wherein at least a portion of the supplemental content is created externally from the computer system." Ans. 20–21. We therefore reverse the rejection of claim 35 for the same reasons as stated above with respect to claim 1.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 32, 33, 36, 38, 39, 41, 42, 44, 45, 47, 48	103(a)	Grewal, Mercuri		1, 32, 33, 36, 38, 39, 41, 42, 44, 45, 47, 48
35	103(a)	Grewal, Mercuri, Warshavsky		35
Overall Outcome				1, 32, 33, 35, 36, 38, 39, 41, 42, 44, 45, 47, 48

REVERSED