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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ADAM LEE

Appeal 2018-001381
Application 13/397,014
Technology Center 3600

Before CYNTHIA L. MURPHY, BRADLEY B. BAYAT, and TARA L. HUTCHINGS, *Administrative Patent Judges*.

MURPHY, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

The Appellant[2] appeals from the Examiner's rejections of claims 1–7, 9–20, and 22–26 under 35 U.S.C. §§ 101 and 103. We sustain the Examiner's rejection under 35 U.S.C. § 101 (Rejection I); and we do not sustain the Examiner's rejections under 35 U.S.C. § 103 (Rejections II and III).

Thus, we AFFIRM.

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[1] We have jurisdiction over this appeal under 35 U.S.C. §§ 6(b) and 134.

[2] "The real party in interest is Boku, Inc." (Appeal Br. 3.)

BACKGROUND

According to the Appellant, the claims on appeal "are specifically directed to **budget rule based budget adjustment methodology**." (Appeal Br. 18.)

A budget is defined as "an estimate, often itemized, of expected income and expense for a given period in the future," and "an itemized allotment of funds, time, etc., for a given period."[3] Thus, a "budget" is a fundamental economic practice which facilitates a person's management of his/her spending behavior. And with a budget, a person allots his/her expected income (e.g., monthly paycheck) to expected itemized expenses.

For example, suppose a person receives a monthly paycheck of $200.00. (*See e.g.*, Spec., ¶ 106, Figs. 6B, 10.) There are certain necessities, such as food, that this paycheck must cover, and so the person will allot enough money for groceries (e.g., $50.00). (*See e.g.*, *id.*, ¶ 112, Fig. 23.) The person will also allot discretionary expenses such as those associated with buying new clothes (e.g., $50.00 for apparel) and dining out (e.g., $50.00 for restaurants). (*See id.*)

The Appellant calls the person's monthly paycheck of $200.00 "a stored value." (Appeal Br. 6.) The Appellant calls the collective allotments (e.g., $50.00 for groceries, $50.00 for apparel, $50.00 for restaurants) "a plurality of rules" in which each "respective rule is a budget rule with a budget amount." (*Id.*) And the Appellant calls the label for each allotment (e.g., groceries, apparel, restaurants) "a separate respective category of expenses." (*Id.*)

[3] https://www.dictionary.com/ browse/budget (last visited September 22, 2019).

With an old-school budgeting technique, the person would divide the $200.00 from his/her monthly paycheck into separate envelopes labeled with the different categories of expenses (e.g., groceries, apparel, restaurants). Specifically, $50.00 would be put into an envelope labeled "groceries," $50.00 would be put into an envelope labeled "apparel," and $50.00 would be put into an envelope labeled "restaurants." The remaining money ($50.00) would be budgeted as an emergency backup fund that is kept in the person's wallet.

When the person is contemplating the purchase of a $20.00 item of clothing, this purchase must be paid for with money from the "apparel" envelope. As such, the person looks in the "apparel" envelope to see how much money is left, and compares this amount to the purchase price ($20.00) of the item of clothing. The Appellant calls this comparing "the budget amount for the category with the charge amount." (Appeal Br. 7.)

If, towards the end of the month, there is $20.00 in the "apparel" envelope, the person knows that purchasing this $20.00 clothing item is consistent with the budget rule that $50.00 can be spent each month on apparel. If there is only $10.00 left in the "apparel" envelope, the person knows that purchasing this $20.00 clothing item conflicts with the budget rule for the apparel category. This budget-rule conflict would exist even if there was still $20.00 left in the "groceries" envelope, $15.00 left in the "restaurants" envelope, and/or $40.00 left in the person's wallet.

Suppose, however, that an unexpected $80.00 expense arises one month which requires all of the person's $50.00 backup fund, plus another $30.00. This requires an adjustment in the person's budget, as there will only be $120.00 left to spend on groceries, apparel, and restaurants. Food is

a necessity, and so the person would still put $50.00 in the "groceries" envelope, leaving $70.00 for the discretionary-spending envelopes. This $70.00 for discretionary-spending equates to the stored paycheck value ($200.00) minus the adjusted budgeted amounts ($80.00 and $50.00). Accordingly, even if the purchase of the $20.00 clothing item would normally be consistent with the person's monthly allotment of $50.00 for apparel, the person will not purchase this clothing item if it would cause discretionary spending to exceed $70.00.

As indicated above, according to the Appellant, the claims on appeal "are specifically directed to **budget rule based budget adjustment methodology**." (Appeal Br. 18.) This methodology consists of a person's budget being based on budget rules with categorized budget amounts (e.g., $50.00 for groceries, $50.00 for apparel, $50.00 for restaurants), and adjusting at least some of these budget amounts when unexpected expenses occur.

ILLUSTRATIVE CLAIM

> 14. A computer-based method of managing electronic transactions, comprising:
>
> [(a)] storing, with a processor, a plurality of consumer accounts in a data store, each consumer account having a first consumer account identifier;
>
> [(b)] displaying an interface for display on a consumer device, the interface having at least one component for a consumer to a plurality of rules and transmit each respective rule, wherein the respective rule is a budget rule with a budget amount;
>
> [(c)] receiving, with the processor, the rule over the network interface device from the consumer device;

> [(d)] storing, with the processor, a rule in association with the consumer account, wherein rules for a plurality of budget amounts are stored, each respective rule for a separate respective category of expenses;
>
> [(e)] receiving, with the processor, a charge over the network interface device, the charge including a charge amount, a second consumer account identifier and a category;
>
> [(f)] identifying, with the processor, a selected one of the consumer accounts by associating one of the first consumer account identifiers with the second consumer account identifier;
>
> [(g)] determining, with the processor, a category based on the charge;
>
> [(h)] retrieving, with the processor, one of the budget rules of the selected consumer account having the category matching the category of the charge in response to receiving the charge;
>
> [(i)] executing, with the processor, an action based on the budget rule;
>
> [(j)] comparing, with the processor, the budget amount for the category with the charge amount;
>
> [(k)] determining, with the processor, whether the charge amount is less than a stored value minus all other budget amounts for the consumer account;
>
> [(l)] reducing, with the processor, the budget amount for the category with the charge amount only if the charge amount is less than the stored value minus all other budget amounts for the consumer account and the charge amount is less than the budget amount and the interface displays the budget amount for the category after the budget amount has been reduced.

REJECTIONS

I. The Examiner rejects claims 1–7, 9–20, and 22–26 under 35 U.S.C. § 101 as reciting a judicial exception without significantly more. (Final Action 2.)

II. The Examiner rejects claims 1, 9, 14, and 22 under 35 U.S.C. § 103 as unpatentable over Jain[4] and Chen.[5] (Final Action 4.)

III. The Examiner rejects claims 2–7, 10–13, 15–20, and 23–26 under 35 U.S.C. § 103 as unpatentable over Jain, Chen, and Phillips.[6] (Final Action 7.)

ANALYSIS

Claims 1 and 14 are the independent claims on appeal, with the rest of the claims on appeal depending therefrom. (*See* Appeal Br., Claims App.) Independent claim 14 sets forth a "computer based method" comprising steps (a)–(l); independent claim 1 sets forth a "computer system" comprising instructions for performing similar steps. (*Id.*)

Rejection I – 35 U.S.C. § 101

The Examiner determines that independent claim 14 is "directed to" an abstract idea and that "the generically recited computer elements do not add a meaningful limitation to the abstract idea because they would be routine in any computer implementation." (Final Action 2.) More succinctly, the Examiner concludes that independent claim 14 fails the *Alice* test for patent eligibility.[7]

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[4] US 2014/0129356 A1, published May 8, 2014.

[5] US 2006/0151598 A1, published July 13, 2006.

[6] US 2011/0238539 A1, published September 29, 2011.

[7] In *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014), the Supreme Court provided a two-step test to guard against an attempt to patent purely an abstract idea. (*Id.* at 217–18.) In the first step of the *Alice* test, a determination is made as to whether the claim at issue is "directed to" an abstract idea. (*Id.* at 218.) In the second step of the *Alice* test, a

The 2019 Revised Patent Subject Matter Eligibility Guidance ("2019 Guidance") provides us with specific steps for discerning whether a claim passes the *Alice* test for patent eligibility. (*See* Federal Register Vol. 84, No. 4, 50–57.) These steps are "[i]n accordance with judicial precedent" and consist of a two-pronged Step 2A and a Step 2B. (*Id.* at 52.)

In the first prong of Step 2A (Prong One), we evaluate whether the claim recites a judicial exception, such as an abstract idea. (2019 Guidance at 54.) The 2019 Guidance "extracts and synthesizes key concepts identified by the courts as abstract ideas," these concepts include "[c]ertain methods of organizing human activities," particularly "fundamental economic principles or practices," and "managing personal behavior." (*Id.* at 52.)

Steps (a)–(d) recite limitations that equate to a person budgeting his/her paycheck of $200 by putting $50.00 into envelopes labeled "groceries," "apparel," and "restaurants," which would leave $50.00 for an unexpected expense. Steps (e)–(j) recite limitations that equate to a person contemplating a purchase of a clothing item costing $20.00, and looking to see whether there is $20.00 left in the "apparel" envelope. Step (k) recites limitations that equate to a person adjusting the amount of money put into discretionary-spending envelopes if an unexpected expense exceeds $50.00. And step (l) recites limitations that equate to $20.00 being taken from the "apparel" envelope to pay for the $20.00 clothing item.

Thus, steps (a)–(l) recite a method for "managing personal behavior" (i.e., managing a person's spending behavior via a budget), which is a

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determination is made as to whether additional elements transform the claim into something "significantly more" than the abstract idea. (*Id.* at 218–19.)

"[c]ertain method[] of organizing human activities," and therefore an abstract idea. (2019 Guidance at 52.)[8]

Consequently, independent claim 14 recites an abstract idea under the first prong of Step 2A (Prong One), and we proceed to the second prong of Step 2A (Prong Two) of the 2019 Guidance.

In Prong Two, we evaluate whether the claim contains additional elements that "integrate" the abstract idea "into a practical application." (2019 Guidance at 54.) "Additional elements" are "claim features, limitations, and/or steps that are recited in the claim beyond the identified judicial exception." (*Id.* at 55, n.24.) As such, an "additional element" in independent claim 14 can only be an element that is not part of the person's management of his/her spending behavior via a budget strategy.

Independent claim 14 requires steps (a) and (c)–(l) to be performed "with a processor." (Appeal Br., Claims App.) Step (b) requires "an interface for display on a consumer device." (*Id.*) And steps (c) and (e) further require the processor to receive information "over [a] network interface device." (*Id.*) A person's management of his/her spending behavior via a budget strategy does not necessarily require a processor, a consumer device, a display interface, and/or a network interface device. These computer components qualify, therefore, as additional elements that could potentially integrate the Appellant's budget methodology into a practical application. Here, however, these computer components, and their

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[8] *See also Intellectual Ventures I LLC v. Capital One Bank (USA)* 792 F.3d 1363, 1367 (Fed. Cir. 2015) (A claim directed to "tracking financial transactions to determine whether they exceed a pre-set spending limit (i.e., budgeting)" is a claim "directed to an abstract idea").

interaction, are used merely as "a tool" to implement the claimed budget methodology. (2019 Guidance at 55.)[9]

Consequently, the additional elements in independent claim 14 do not integrate the abstract idea into a practical application under Prong Two of Step 2A of the 2019 Guidance. Thus, we proceed to Step 2B of the 2019 Guidance.

In Step 2B, we evaluate whether "additional elements recited in the claim[] provide[s] 'significantly more' than the recited judicial exception." (2019 Guidance at 56.) More particularly, we evaluate whether these additional elements "add[] a specific limitation or combination of limitations that are not well-understood, routine, conventional activity," or whether they instead "simply append[] well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception." (*Id.*)

The Specification describes a conventional processor 930, a conventional network interface device 948, a conventional consumer device 24, and a conventional touch screen 1120. (*See* Spec. ¶¶ 123–125, 127–136, Figs. 29, 30.) The Specification also describes the processor's receipt of information, via the network interface device 948, as conventional. (*See id.* ¶ 124, Fig. 29.) Thus, independent claim 14's additional elements are conventional computer components performing conventional computer functions.

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[9] *See e.g., Intellectual Ventures* 792 F.3d at 1367 ("[W]hile the claims recite budgeting using a 'communication medium' (broadly including the Internet and telephone networks), that limitation does not render the claims any less abstract").

Consequently, the additional elements in independent claim 14 do not provide significantly more than the recited abstract idea under Step 2B of the 2019 Guidance.

We agree, therefore, with the Examiner's conclusion that independent claim 14 fails the *Alice* test for patent eligibility.

The Appellant's arguments are premised upon independent claim 14 being "directed to a specific improvement to the way computers operate, embodied in **budget rule based budget adjustment methodology**." (Appeal Br. 16.) According to the Appellant, this "software" makes "non-abstract improvements to computer technology," as was the case in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), and *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). (*Id.* at 15.)

We agree with the Appellant that independent claim 14 is directed to a methodology in which a person's budget is based on budget rules with categorized budget amounts, which can be adjusted when unexpected expenses occur. And we agree with the Appellant that "claims directed to software" are not "inherently abstract." (*Enfish* 822 F.3d. at 1135.) The problem is that, as discussed above, the Appellant's budget rules equate to a person budgeting his/her $200 paycheck by putting $50.00 into envelopes labeled "groceries," "apparel," and "restaurants," and then adjusting these amounts when an unexpected expense exceeds $50.00. (*See* Spec. ¶¶ 56, 64, 117–121, Fig. 28.)

In contrast, in *Enfish*, the claimed self-referential table eliminated the need for "a programmer to preconfigure a structure to which a user must adapt data entry," and allowed "increased flexibility, faster search times, and smaller memory requirements." (*Enfish* 822 F.3d. at 1137.) And, while

deployment of a traditional relational database involved "extensive modeling and configuration of the various tables and relationships in advance of launching the database," *Enfish*'s self-referential database could be launched "with no or only minimal column definitions" and configured and adapted "on-the-fly." (*Id.* at 1333.) This allowed "increased flexibility, faster search times, and smaller memory requirements." (*Id.* at 1337.)

The Appellant argues that its budget methodology "functions differently than conventional database structures" (Appeal Br. 18), but neither the Appellant nor the Specification explain why. Thus, we do not believe that the Appellant's budget methodology belongs on the same end of the innovative-software spectrum as *Enfish's* self-referential database, which was drastically different from "a situation where general-purpose computer components are added post-hoc to a fundamental economic practice or mathematical equation." (*Enfish*, 822 F.3d at 1339.)

In *McRO*, the Federal Circuit did hold that a claim in which "rules" were "embodied in computer software" was not directed to an abstract idea. (*McRO* 837 F.3d at 1314.) However, the Federal Circuit very closely scrutinized the sophistication of the rules claimed in *McRO*. (*See id.* at 1311.) For example, the Federal Circuit specifically distinguished "rules that only evaluate individual phonemes" from the claimed rules that required the evaluation of "sub-sequences," the generation of "transition parameters," and the application of "transition parameters to create a final morph weight set." (*Id.* at 1311, 1314.)

Here, the Appellant simply argues that the claimed budget rules have "benefits" over conventional systems. (Appeal Br. 18.) Thus, insofar as the Appellant is asserting that the claimed budget rules rise to the same level of

sophistication as the *McRO* morph-weight rules, we disagree. At most, the Appellant's budget rules provide an improved budget methodology, which reflects an improvement to the abstract idea, not computer technology.

The Appellant calls our attention to the importance of considering additional claim elements "in combination" during the *Alice* test, as epitomized in *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). (*See e.g.*, Appeal Br. 29–30.) Indeed, in *Bascom*, the Federal Circuit elucidated that it is sometimes possible for "an inventive concept" to reside in "the non-conventional and non-generic arrangement of known, conventional pieces," such as "a set of generic computer components." (*Bascom*, 827 F.3d at 1350.) Here, however, the computer components recited in independent claim 14 are arranged to interact in a conventional manner, as was explained above.

Thus, we sustain the Examiner's rejection of independent claim 14 under 35 U.S.C. § 101.

The Appellant argues claims 1–7, 9–20, and 22–26 as a group for this rejection (*see* Appeal Br. 10–20), and so they fall together. (*See* 37 CFR § 41.37(c) (1)(iv).) Thus, we also sustain the Examiner's rejection of claims 1–7, 9–13, 15–20, and 22–26 under 35 U.S.C. § 101.

Rejections II and III – 35 U.S.C. § 103

The Examiner determines that independent claim 1 and independent claim 14 would have been obvious over the combined teachings of Jain and Chen. (*See* Final Action 4–7.)

Independent claim 1 recites a "rule application engine" which "determines whether [a] charge amount is less than a stored value minus all other budget amounts for [a] consumer account." (Appeal Br., Claims App.)

Independent claim 14 recites the step of "determining, with the processor, whether [a] charge amount is less than a stored value minus all other budget amounts for [a] consumer account." (*Id.*)

The Examiner finds that Chen discloses such a determination. (*See* Final Action 6.) The Examiner cites to certain paragraphs and drawings in Chen (i.e., Chen ¶¶ 59, 61–63, Figures 7 and 8) to support this finding. (*See id.*) According to the Examiner, the cited paragraphs and drawings disclose "an overall spending limit," "category limits that are based on the overall spending limit," and a determination of whether "[a] transaction amount is within the limit set for the specific category," and approval of a transaction "if the transaction amount (charge amount) is within the category limit (stored value minus other budget amounts)." (Answer 17.)

The Appellant argues that the Examiner does not sufficiently support a finding that Chen discloses the determination required by independent claims 1 and 14 (i.e., a determination of "whether the charge amount is less than a stored value minus all other budget amounts for the consumer account"). (Appeal Br. 26.)

We are persuaded by this argument. Chen teaches a budget methodology in which a person's budget can be based on budget rules with categorized budget amounts (*see* Chen ¶ 59, Fig. 7); Chen teaches declining a transaction when the transaction amount exceeds the budgeted amount (*see id.* ¶ 63, Fig. 8); and Chen teaches declining a transaction when the transaction amount exceeds the person's overall account balance (*see id.* ¶ 61, Fig. 8). However, the Examiner does not explain adequately why Chen teaches declining a transaction when the transaction amount exceeds the person's overall balance *minus other budgeted amounts*.

Thus, we do not sustain the Examiner's rejection of independent claims 1 and 14 under 35 U.S.C. § 103.

The Examiner's further findings with respect to the dependent claims do not cure the above-discussed shortcomings of the Examiner's rejection of the independent claims. (*See* Final Action 6–11.) Thus, we also do not sustain the Examiner's rejections of dependent claims 2–7, 9–13, 15–20, and 22–26 under 35 U.S.C. § 103.

DECISION

We AFFIRM the Examiner's rejection of claims 1–7, 9–20, and 22–26 under 35 U.S.C. § 101.

We REVERSE the Examiner's rejections of claims 1–7, 9–20, and 22–26 under 35 U.S.C. § 103.

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