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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NICHOLAS J. WITCHEY[1]

Appeal 2018-003839
Application 14/179,802
Technology Center 3700

Before JOHN C. KERINS, EDWARD A. BROWN, and ARTHUR M. PESLAK, *Administrative Patent Judges*.

KERINS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–19. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

THE CLAIMED SUBJECT MATTER

Appellant's invention relates to a computer-based gaming system. Claim 1, reproduced below, is illustrative:

[1] Vanav Holdings is identified as the real party in interest. Appeal Br. 4.

1. A computer-based gaming system comprising:

an electronic physical real-world game component having:

a non-transitory computer readable memory including an asset storage area that is configured to store at least one representation of an in-game re-locatable asset as a re-locatable asset data structure associated with a computer game, wherein production of the physical real-world game component is influenced by a corresponding in-game virtual representation of the physical real-world game component described by data members of the relocatable asset data structure and wherein the asset storage area initially lacks the in-game re-locatable asset data structure; and

a wireless connector coupled with the asset storage area; and

a computer game server configured to:

host the computer game, said computer game including a virtual game world;

establish a connection with the electronic physical real-world game component via the wireless connector through an intermediary wireless asset reader;

obtain the in-game re-locatable asset data structure associated with the in-game virtual representation of the physical real-world game component, the in-game re-locatable asset data structure's data members having parameters associated with the virtual representation of the physical real-world game component and including a variable value able to change outside the virtual game world;

store the in-game re-locatable asset data structure in the asset storage area of the electronic physical real-world

> game component through the intermediary wireless asset reader and via the wireless connector; and
>
> host the corresponding virtual representation of the physical real-world game component in the game by cooperating with the in-game re-locatable asset data structure's data members stored in the physical game component, the virtual representation having an in-game value derived from the parameters from the in-game re-locatable asset data structure updated via the asset reader.

THE REJECTION

The Examiner rejects claims 1–19 under 35 U.S.C. § 101, as being drawn to patent-ineligible subject matter.

ANALYSIS

Appellant presents arguments for the patent eligibility of claims 1−19 as a group, and states that, for the purposes of this appeal, claims 1–19 stand or fall together. Appeal Br. 12. We select claim 1 as the representative claim, and claims 2−19 stand or fall with claim 1.

An invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int*'l, 573 U.S. 208, 216 (2014) (citation omitted).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *See Alice*, 573 U.S. at 217−18 (citing *Mayo Collaborative Servs.*

v. Prometheus Labs., Inc., 566 U.S. 66, 75−77 (2012)). In accordance with that framework, we first determine what concept the claim is "directed to." *Id*. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, i.e., the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk.").

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219-20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594-95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as "molding rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id*. at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 252, 267−68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "we must examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (citation omitted). "A claim that recites an abstract idea must include 'additional features' to ensure 'that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].'" *Id.* (quoting *Mayo*, 566 U.S. at 77) (alteration in original).

"[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention." *Id.*

In January of 2019, the PTO published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (hereinafter "Guidance"). Under Step 2A of that Guidance, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)-(c), (e)-(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look, in Step 2B, to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Guidance.

Step 1 -- Statutory Category

Claim 1 recites a computer-based gaming system, and, therefore, is a machine or manufacture. *See* Appeal Br. 22 (Claims App.).

Step 2A, Prong 1 -- Recitation of Judicial Exception

In determining that claim 1 is directed to a judicial exception to patent eligibility, the Examiner takes the position that the claim recites "program elements for managing a game," which elements are "similar to the kind of 'organizing human activity' and 'an idea in itself" at issue in *Alice Corp*." Final Act. 7. The Examiner characterizes claim 1 as involving an "abstract idea of managing a game by organizing, storing, and transmitting the new and stored information and using rules to identify options," similar to the "collecting of information, analyzing it, and displaying certain results of the collection and analysis," found to be ineligible in *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016). *Id.* The Examiner additionally summarizes the claim limitations as requiring a game server to be configured to host a computer game including a virtual game world; establish a wireless connection with an electronic physical real-world game component (computer readable memory); obtain an in-game re-locatable asset data structure; store the in-game relocatable asset structure; and host the corresponding virtual representation of the game; all of which amount to an abstract idea in the form of organizing, storing, and transmitting information. Ans. 3–4.

Appellant criticizes both of the above characterizations advanced by the Examiner, as improper oversimplifications that omit various relevant claim features. Reply Br. 5. Appellant maintains that the Examiner fails to consider limitations involving "the in-game re-locatable asset data structure's data members having parameters associated with the virtual representation of the physical real-world game component and including a variable value able to change outside the virtual game world," and "the

virtual representation having an in-game value derived from the parameters from the in-game re-locatable asset data structure updated via the asset reader." *Id.* Appellant maintains that both of these limitations relate to the interrelationship between the electronic physical real-world game component and a computer-based virtual game world.

The two limitations Appellant argues to have been disregarded are merely virtual objects or things that the recited computer game server is to be configured to obtain and operate with, when they exist and are present, but are not objects or things that are positively recited in claim 1. Claim 1 specifically states that the asset storage area of the computer readable memory of the electronic physical real-world game component "*initially lacks the in-game re-locatable asset data structure*," and the claim nowhere positively introduces the in-game re-locatable asset data structure as an element of the claim. Appeal Br. 22–23 (Claims Appendix) (emphasis added). As such, the Examiner's alleged failure to consider those limitations, even if accurate, does not rise to the level of error as an oversimplification as to what claim 1 includes.

Appellant further maintains that, even beyond the limitations said to be ignored, the Examiner's summary of the claimed invention goes beyond any recognized abstract idea, including '"organizing, storing, and transmitting information,'" or '"collecting information, analyzing the stored information, and presenting a certain set of the collected and stored information.'" Reply Br. 5. Appellant highlights the limitation requiring that the computer game server be configured to "host the corresponding virtual representation of the game," averring that Appellant is aware of no precedential decision that has considered such a limitation to be an abstract

idea or a part thereof. *Id.* at 5–6. Appellant additionally argues that "the claimed invention addresses a challenge particular to computer-based virtual game worlds that does not arise in the real world, namely challenges in the convenience and security of virtual asset transfers and enhancing the value of such virtual assets." *Id.* at 6.

The system of claim 1 includes an "electronic physical real-world game component" having a computer readable memory and a wireless connector, and a computer game server. The computer readable memory is "configured to" store data having particular characteristics relative to an associated computer game, but is essentially a standard memory or storage device such as an RFID tag, or magnetic strip, on a card. *See* Spec. 6:9–15. As noted previously, claim 1 does not require that the data be resident in or on the memory or storage as part of the claimed system

Claim 1 also recites that the computer game server is "configured to" perform steps or operations of: (1) "host[ing] the computer game including a virtual game world;" (2) "establish[ing] a connection with the electronic physical real-world game component via the wireless connector through an intermediary wireless asset reader;" (3) "obtain the in-game re-locatable asset data structure associated with the in-game virtual representation of the physical real-world game component;" (4) "store the in-game re-locatable asset data structure;" and (5) "host the corresponding virtual representation of the physical real-world game component in the game." Appeal Br. 22–23 (Claims Appendix)

When a computer game server is actually called upon to perform these steps or operations, step (1) of hosting a computer game including a virtual game world involves having software running on the server to execute steps

(2)–(5), along with whatever non-specified actions are required in accordance with whatever non-specified game rules are imposed in the software. The non-specified actions, because they involve playing a game, can be seen as collecting and analyzing, or managing, data to effect actions in accordance with the game rules, which can further be characterized as a series of mental steps or mental processes.[2] As such, they fall into the category of abstract ideas.

Steps (2)-(5) are steps involved in collecting data to be used in the playing of the game, to wit, establishing a connection such that a data structure may be obtained onto and stored on the physical real-world game component, and hosting a corresponding virtual representation of the physical real-world game component in the game. These, too, involve collecting or transferring data in accordance with game rules, which, absent the use of a computer/server, could be performed as a series of mental steps or mental processes, and present an abstract idea.

Accordingly, the outcome of our analysis under Step 2A, prong 1, requires us to proceed to Step 2A, prong 2. *See* Guidance, 84 Fed. Reg. at 54.

Step 2A, Prong 2 -- Integrated Into a Practical Application

In Step 2A, Prong 2, we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional

[2] Rules of a game themselves have been held to be abstract ideas. *See*, *In re Guldenaar*, 911 F.3d 1157, 1159 (Fed. Cir. 2018); *In re Smith*, 815 F.3d 816 (Fed. Cir. 2016).

elements individually and in combination to determine whether they integrate the exception into a practical application. *See generally*, Guidance. This evaluation requires an additional element or a combination of additional elements in the claim to apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the exception. *See id*.

Appellant argues that "the claimed invention addresses a challenge particular to computer-based virtual game worlds that does not arise in the real world, namely challenges in the convenience and security of virtual asset transfers and enhancing the value of such virtual assets." Reply Br. 6. Appellant additionally argues that the recited computer components do not perform generic functions, but rather perform highly-specific, non-generic functions. *Id.* at 11. Appellant maintains that the claimed memory "does not merely generically store data but stores 'at least one representation of an in-game re-locatable asset as a re-locatable asset data structure associated with a computer game."' *Id.* In addition, according to Appellant, the claimed server does not generically receive or transmit data, it instead "host[s] the corresponding virtual representation of the physical real-world game component in the game by cooperating with the in-game re-locatable asset data structure's data members stored in the physical game component." *Id.*

We disagree with Appellant's contentions. Appellant does not explain how the stored "asset data structure" is anything other than "data" of a particular type, nor how it is stored in the claimed memory in some non-generic manner. Similarly, that the claimed server is configured to "host"

the particular type of data recited does not change the fact that the recited hosting appears to be no different than storing data reflective of data that is also stored on the claimed memory. To the extent that Appellant envisions that there is something involving the "cooperating with" language that result in an integration into a practical application, claim 1 is devoid of any language or limitation that evidences that the "cooperation" is a specific type of action that excludes generically storing, receiving, or transmitting data.

The computer-readable memory and wireless connector making up the electronic physical real-world game component, and the computer game server provided in claim 1 do not amount to a particular machine or manufacture that is integral to the claim. Rather, such components are broadly recited generic items usable in games other than the one envisioned by Appellant.

Nor is there any transformation recited in claim 1 sufficient to impart patent eligibility. Although claim 1 requires the computer game server to be configured to handle data having a particular meaning within the game, the claim requires only that the data be transmitted between the server and the memory of the electronic physical real-world game component.

Appellant further argues that claim 1 offers a solution to an underlying problem that is "necessarily rooted in computer technology." Reply Br. 10. According to Appellant, certain limitations in claim 1 "refer inseparably to both the real and virtual worlds, thus reciting interrelationships between a physical real-world game component and an in-game virtual representation of that game component." *Id.* (emphasis omitted). Appellant posits that there is logically no purely real world equivalent to the claimed solution. *Id.*

As claim 1 is directed to a system having an object such as a trading card (Spec. 6:5) including a computer readable memory and a wireless connector, and a computer game server with the capability of obtaining, storing and hosting an asset data structure that is not positively recited in the claim ("the asset storage area initially lacks the in-game re-locatable asset data structure"), we do not view claim 1 as providing any particular solution to any particular problem.

Claim 1 thus does not integrate the recited judicial exception into a practical application. Accordingly, we proceed to step 2B.

Step 2B -- Well-Understood, Routine, Conventional Activity

In Step 2B, we determine whether the claim adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field. *See* Guidance. Appellant's Specification evidences that the computer readable memory, the wireless connector, and the computer game server are conventional components. . The asset storage area of the computer readable memory may be an RFID tag or flash memory. Spec. 10:10–13. The wireless connector is a standard component. *Id.* at 7:4–5. The computer game server is a standard component, as well. *See, e.g., id.* at 7 (repeated reference simply to a "server 120").

Appellant criticizes the Examiner's findings in this respect by asserting that the claimed memory "stor[es] 'at least one representation of an in-game relocatable asset as a re-locatable asset data structure associated with a computer game.'" Reply Br. 13. Appellant further notes that the server is recited as being "configured to 'host the corresponding virtual representation of the physical real-world game component in the game by

cooperating with the in-game re-locatable asset data structure's data members stored in the physical game component.'" *Id.* Appellant thus maintains that the claimed memory and server are not generic as claimed, and that the combination of the memory and server is unconventional.

The Specification does not evidence that a particular memory or server architecture or structure is altered in any manner such that the functions recited in the claim are capable of being performed. Rather, the Specification is silent with respect to anything other than the provision of a computer readable memory of a known type, and, for the server, discloses that the functionality required is provided by software, and not through the use of a non-conventional server. Spec. 6:9–15; 7:17–22.

Thus, claim 1 is not seen as adding any specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field.

We have considered all of Appellant's arguments in support of the patent eligibility of claim 1, but find them unpersuasive. Accordingly, we sustain the rejection of claims 1−19 under 35 U.S.C. § 101.

DECISION

The Examiner's rejection of claims 1–19 under 35 U.S.C. § 101 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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED