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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KEITH J. BURZA, DAMON E. GURA,
PATRICK M. GUSTAFSON, and DAVID W. HASSON

Appeal 2017-008296
Application 13/787,229
Technology Center 3700

Before EDWARD A. BROWN, WILLIAM A. CAPP, and
LISA M. GUIJT, *Administrative Patent Judges*.

GUIJT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Examiner's rejection² of claims 1–5, 16–20, and 26–30. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants identify the real party in interest as Bally Gaming, Inc. Appeal Br. 1.

² Appeal is taken from the Final Office Action dated May 9, 2016.

STATEMENT OF THE CASE

Claims 1, 16, and 26 are the independent claims on appeal. Claim 1, reproduced below, is exemplary of the subject matter on appeal.

1. A computer-implemented method for providing tutorial content explaining a live casino table game, the method comprising:

capturing, by a camera, a video stream of the live table game, wherein the live casino table game involves a game table and game pieces including at least one of a die, a spinning wheel or a ball,

determining, by one or more processors, a game state for the live casino table game;

determining, by the one or more processors, the tutorial content based on the game state for the live casino table game, wherein the tutorial content includes information explaining strategy for the live casino table game;

transmitting, over a network for presentation on a display device of a remote computing device, a content stream including the video stream of the live casino table game and the tutorial content.

THE REJECTIONS

- I. Claims 1–5, 16–20, and 26–30 stand rejected under 35 U.S.C. § 101.
- II. Claims 1–5, 16–20, and 26–30 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

ANALYSIS

Rejection I

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim

laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends; otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether the additional elements “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78).

The Court acknowledged in *Mayo*, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. Therefore, the Federal Circuit has instructed that claims are to be considered in their entirety to determine “whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).

Here, the Examiner determines that claim 1 is directed to an abstract idea of “the use of a computer and presumably [a] computer algorithm to provide tutorial information in a live casino game.” Final Act. 3. The Examiner also determines that the limitations of claim 1 are “directed to an implementation of an abstract idea using generic computer component[s] that are considered to be well-understood, routine and conventional activities previously known in the industry.” *Id.* The Examiner further determines that there is no evidence on the record that the limitations of claim 1 recite

an improvement to another technology or technical field, and therefore, the limitations of claim 1 fail to “add additional elements that amount to significantly more than the judicial exception” (i.e., the abstract idea). *Id.* at 3–4.

First, Appellants argue that

[e]mbodiments of claim 1 *overcome problems in electronic network-based tutorial content delivery systems*. As spectators watch a live table game, embodiments enable them to view, on their mobile phones, the live game and tutorial content immediately relevant to the live table game (see Figure 1). As a result, embodiments dynamically select and deliver relevant tutorial content that is visually integrated with images of the live table game, giving spectators an unparalleled learning experience. Without such novel embodiments, casino-based tutorial content delivery systems are left delivering generic content that is likely irrelevant to current game situations, and that is visually disjointed from live games.

Appeal Br. 5 (emphasis added); *see also id.* at 7 (“claim 1 addresses issues related to electronically selecting situation-appropriate tutorial content and delivering it over a computer network to a smart phone,” and “[t]hese issues are necessarily rooted in computer technologies, just as the claims in *DDR Holdings*.”³).

The problem addressed by Appellants’ invention is to provide tutorial content to a patron that is relevant to a live casino game, rather than generic content that may not be relevant to live play. Spec. ¶ 16. However, Appellants’ argument, without evidence, does not apprise us of how claim 1 overcomes problems in electronic network-based tutorial content delivery

³ *DDR Holdings, LLC V. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014).

systems that are necessarily rooted in computer technology. *See, e.g., DDR Holdings, LLC V. Hotels.com, L.P.*, 773 f.3D 1245, 1257 (Fed. Cir. 2014) (determining that “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks”). Although claim 1 requires a camera, processors, a network, and a display device of a remote computing device to augment a live casino table game, Appellants have not identified a problem specifically arising in the realm of computer networks addressed by claim 1. Rather, the claimed method uses a conventional camera to capture a video stream of a live casino table game, conventional processors to determine both a live game state and tutorial content based on the live game state, and a conventional network, whereby a content stream including the live game video stream and relevant tutorial content are transmitted to a conventional display device of a conventional remote computing device. *See Spec.* ¶ 28 (“wagering game network 400 includes a plurality of casinos 412 connected to a communications network 414”); ¶ 29 (“[e]ach casino 412 includes a local area network 416, which includes an access point 404, a wagering game server 406, and wagering game machines 402,” wherein “access point 404 provides wireless communication links 410 and wired communications links 408 . . . employ[ing] any suitable connection technology”); ¶ 30 (“wagering game network 400 includes a table game server 422 connected to a camera 418 . . . positioned over a wagering game table 424,” wherein camera 418 can transmit video to the table game server 422, which can store the video” and “table game server 422 can include a web server capable of distributing the video and [tutorial] content . . . over the Internet to mobile phones”); ¶ 36 (“[a]ny of the wagering game network components (e.g., the

wagering game machines 402) can include hardware and computer readable media including instructions for performing the [claimed] operations”). Appellants’ advance, to the extent there may be one, lies entirely within the realm of abstract ideas, which realm is not eligible for patenting. *See buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1352 (Fed. Cir. 2014) (abstract idea is ineligible even if it is groundbreaking, innovative, or brilliant).

Thus, we are not apprised of error in the Examiner’s determination that claim 1, considering the character of claim 1 as a whole, is directed to the abstract idea of using computer technology to provide tutorial information in a live casino game, or that claim 1, when its elements are considered individually and as an ordered combination, fails to recite additional elements that transform the nature of the claim into a patent-eligible application.

Appellants also argue that

[l]ike *McRO*, claim 1 *provides improvements to computer-related technology*. Claim 1’s improvements relate to visually determining a game state for a live casino table game, and providing a video stream showing the live table game and tutorial content relevant to a situation in the table game. *At the time of filing, the prior art did not teach or suggest the claimed method*. This novel functionality improves tutorial content delivery system by electronically recognizing game states, and providing selected tutorial content relevant to those game states. Because the system can select and provide tutorial content related to contemporaneous game events, the system delivers relevant tutorial content at relevant times.

Appeal Br. 6 (citing *McRO v. Bandai Namco Games America*, 837 F.3d 1299 (Fed. Cir. 2016)) (emphasis added); *see also id.* at 7 (“[claim 1] recites non-trivial instructions that improve the existing technology and address a

problem of effectively selecting and timely providing, over a computer network, tutorial content relevant to currently-occurring game states”).

As discussed *supra*, Appellants do not provide evidence that claim 1 improves any computer-related technology, but rather uses generic computing components to implement the method for providing tutorial content relevant to a live video game. *See In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984) (“Arguments and conclusions unsupported by factual evidence carry no evidentiary weight”). Further, a novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90. *See also Diamond v. Diehr*, 450 U.S. 175, 188-89 (1981) (“The ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.”). Notably, augmenting entertainment games with computer technologies is well known and conventional, as evidenced by Okada.⁴ Okada p. 1 (“Applications of computer technologies to various entertainments have been researched, known as ‘entertainment computing.’”). Okada specifically discloses “[an] augmented reality (AR) user interface for playing table games,” wherein a system “captures cards in the player’s view via a camera, recognizes the current state, and visually

⁴ Application and Evaluation of Augmented Reality User Interface to a Card Game “Scopa,” by Hidehiko Okada and Takashi Matsuse, SICE Annual Conference, 2011, as cited in the Non-Final Office Action dated November 5, 2015.

augments cards to guide the user [to] perform appropriate actions (e.g., discard an unwanted card).”⁵ *Id.*

Thus, we are not apprised of error in the Examiner’s determination that claim 1, considering the character of claim 1 as a whole, is directed to the abstract idea of using computer technology to provide tutorial information in a live casino game, or that claim 1, when its elements are considered individually and as an ordered combination, fails to recite additional elements that transform the nature of the claim into a patent-eligible application.

Although Appellants further argue that “claim 1 recites additional elements that transform the nature of claim 1 into a patent-eligible application,” Appellants fail to identify with any specificity which elements recited in claim 1 are purportedly transformative. *See* Appeal Br. 6–7. We agree with the Examiner that the recitation of generic computing components is insufficient.

Appellants also argue that “[w]hen taken as a whole, each claim does not preempt all embodiments of any abstract idea,” for example, “claim 1 does not preempt all methods of providing tutorial content that explains a live casino table game.” Reply Br. 2.⁶ We also are not persuaded by Appellants’ argument that the § 101 rejection cannot be sustained because

⁵ *See* Amendment dated March 8, 2016, whereby Appellants amended claim 1 to recite “wherein the live casino table game involves a game table and game pieces including at least one of a die, a spinning wheel, or a ball,” and to also include the recitation of “processors” and the functional language “for presentation on a display device of a remote computing device,” in response to the Examiner’s reliance on Okada.

⁶ The Reply Brief omits page numbers; we refer to pages 1 to 5.

there is no preemption. Although the Supreme Court has described “the concern that drives [the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption,” *Alice Corp.*, 134 S. Ct. at 2354, characterizing pre-emption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. “The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2354). “[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

Accordingly, we sustain the Examiner’s rejection of independent claim 1. Appellants chose not to present separate arguments for the patentability of claims 2–4 and 16–20, and therefore, for the reasons stated *supra*, we also sustain the rejection of claims 2–4 and 16–20. Appeal Br. 8.

Rejection II

The Examiner determines, *inter alia*, that claim 1 does not comply with the written description requirement of 35 U.S.C. § 112, first paragraph, because Appellants fail to “show the steps or procedures the inventors used to accomplish the claimed function.” Final Act. 4. For example, the Examiner determines that “the [S]pecification as originally filed does not provide a teaching of the steps or procedures the inventors use[d] to accomplish the function of . . . determining game state includes employing computer vision to determine the wagers and results.” *Id.* at 4–5.

Appellants submit that claim 1 as originally filed provides written description support for “determining, by one or more processors, a game state for the live casino table game,” as presently claimed, by disclosing “determining a game state for the live casino table game.” Appeal Br. 9. Appellants also submit that Figure 5 of the Specification provides support for “determining, by one or more processors, a game state for the live casino table game,” as recited in claim 1, in that box 504 discloses “determin[ing] a game state for each player,” in addition to the corresponding description in paragraph 50, which discloses that “[a]t block 504, the table game server 422 processes the video stream and determines a game state for each player,” wherein “[i]n some embodiments, the table game server 422 employs computer vision to determine wagers/moves made by each player.” *Id.* at 10–11. *Id.*

The Examiner responds that the claims as originally filed, Figure 5 of the Specification, and specifically, paragraph 42 of the Specification, “do[] not provide any algorithm that determine[s] the state of the game,” but rather, “only provides the exact same language that the game state should be determined by the server.”⁷ Ans. 11.

Appellants reply that “one of ordinary skill could perform the method of claim 1 without undue experimentation,” and that, “[f]or example, one of ordinary skill in the art would know how to capture a video stream using a camera.” Reply Br. 4. Appellants submit that “[a] for determining game

⁷ Although the Examiner references a rejection under 35 U.S.C. § 112, second paragraph, regarding the indefiniteness of claims 1–5 and 6–20 “[d]ue to the deficiencies of the [S]pecification and the breadth of the claim limitations,” such a rejection does not appear to be formally entered. Ans. 13.

state, the [S]pecification explains alternative ways for determining game state – computer vision or data entered by attendant.” *Id.*

The proper inquiry is “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1352 (Fed. Cir. 2010) (en banc). Here, Appellants have not demonstrated, nor can we find in the Specification, a disclosure of how the computer-implemented method determines, *by one or more processors*, a game state for the live casino table game, as claimed, notwithstanding having received input from a camera.

Accordingly, we sustain the Examiner’s rejection of claim 1, and therefore, also claims 2–5, as failing to comply with the written description requirement. Independent claim 16 similarly recites “instructions to determine a game state of the casino table game” (Appeal Br. 19), and independent claim 26 similarly recites “determining, by one or more processors, a game state for the live casino table game” (*id.* at 20). Because the Examiner relies on the same determinations with respect to independent claims 16 and 26 (*see* Final Act. 4–5; Ans. 9–13) and Appellants present the same arguments as presented with respect to the written description support of this limitation as recited in claim 1 (*see* Appeal Br. 14–16; Reply Br. 3–4) for independent claim 16, while omitted arguments for independent claim 26 (*see* Appeal Br. 8–17; Reply Br. 3–4), we also sustain the Examiner’s rejection of claims 16–20 and 26–30 for the same reasons stated *supra* with respect to claim 1.

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DECISION

The Examiner's decision rejecting claims 1–5, 16–20, and 26–30 under 35 U.S.C. § 101 is affirmed.

The Examiner's decision rejecting claims 1–5, 16–20, and 26–30 under 35 U.S.C. § 112 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