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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MATTHEW ATWOOD WHITAKER and
JOSEPH PAUL RORK

Appeal 2018-002287
Application 14/858,183
Technology Center 3600

Before EDWARD A. BROWN, JAMES P. CALVE, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

MARSCHALL, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ seeks our review under 35 U.S.C. § 134(a) of the Examiner's rejection of claims 1–5, 9–11, and 13–16. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellant is the Applicant, Ford Global Technologies, LLC, which the Appeal Brief identifies as the real party in interest. Appeal Br. 1.

THE CLAIMED SUBJECT MATTER

The claimed subject matter relates to “a method and apparatus for secure pairing” between a device and a vehicle. Spec. ¶¶ 1–2. Claims 1, 10, and 14 are independent. Claim 1 is reproduced below.

1. A system comprising:
a processor configured to:
receive a pairing request from a mobile device to pair with a vehicle;
wirelessly identify simultaneous presence of both a first vehicle key and a second vehicle key; and
approve the request based on the wireless identification.

Appeal Br., Claims App. 1.

THE REJECTIONS

Appellant seeks review of the following rejections on appeal:

1. Claims 1–5, 9–11, and 13–16 under 35 U.S.C. § 101 as directed to ineligible subject matter.
2. Claims 1–5, 10, 11, 14, and 15 under 35 U.S.C. § 103 as unpatentable over Kleve (US 2012/0254948 A1, published Oct. 4, 2012), Harris (US 9,082,295 B1, issued July 14, 2015), and Takizawa (US 2010/0148923 A1, published June 17, 2010).

ANALYSIS

101 Rejection

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and

abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014).

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, 75–77 (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*, 134 S. Ct. at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 79, 78). 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.* (brackets in original) (quoting *Mayo*, 566 U.S. at 72–73).

The Examiner found that the claims are directed to an abstract idea “similar to concepts that have been identified as abstract by the courts, such as (i) obtaining and comparing intangible data and/or (ii) comparing new and stored information and using rules to identify options.” Final Act. 5. The Examiner also found that the claims do not include limitations that amount to “significantly more” than the abstract idea because when considering the limitations individually or as an ordered combination, they do not amount to

more than the abstract idea. *Id.* at 5–6. More specifically, the Examiner found that processor limitations in the claims are no more than generic computer components recited at a high level of generality. *Id.* (citing Spec. ¶¶ 30, 37). The Examiner further found that the aspect of the claims requiring the physical presence of keys does not mandate a different conclusion, because the Examiner “determined that checking for the presence of an identifying object (a key, fob, RFID tag, etc.) was a known method of approving or denying access/communication at the time of filing the application.” *Id.* at 3. The Examiner then referred to the prior art rejections that we will address below, and found that “[c]hecking for the presence of multiple objects is an obvious extension of this practice and was also known in the art,” and that the claims recite “a series of conventional steps which, taken individually or in combination, do not provide any improvement to the technical field.” *Id.*; *see also* Ans. 4 (finding that “there is nothing atypical about [the claimed steps]—individually or as a combination”).

Appellant does not argue that the Examiner erred in finding that the claims² are directed to an abstract idea, or that the limitations when considered individually fail to amount to “significantly more” than the abstract idea. *See* Appeal Br. 4–6. Instead, Appellant confines its argument regarding the § 101 rejection to whether the claims as a whole amount to significantly more. *See id.* In that respect, Appellant contends that the Examiner failed to properly analyze the claims as a whole, which led the Examiner to erroneously conclude that the claims were not directed to

² Appellant does not argue the claims individually, and instead argues the claims subject to the § 101 rejection as a group. *See* Appeal Br. 4–6.

“something more” than the abstract idea. *Id.* Appellant relies on Example 35 from the December 2016 Guidelines, and argues that the example underscores the need to consider the claims as a whole when determining whether the claims are directed to something more. *Id.* at 4–5. After quoting extensively from the example in the Guidelines, Appellant argues that “when viewed as a whole, the combination results in an atypical solution to a problem—here, the problem of preventing unauthorized access to a vehicle system by a mobile device, which is solved in an uncommon and atypical manner by the combination of steps as recited.” *Id.* at 6 (emphasis omitted); *see also* Reply 2 (arguing that the Examiner continues to improperly focus on claim limitations individually, rather than as a whole).

Appellant’s arguments do not apprise us of error in the Examiner’s § 101 rejection. As Appellant does not contest the Examiner’s finding that the claims are directed to an abstract idea and that step 1 of the Alice framework is satisfied, we will therefore not consider that issue here. As to step 2, Appellant’s argument that the Examiner failed to consider the claims as a whole ignores the express language of the rejection, which states three separate times that even when considered as a “combination,” the claims fail to amount to significantly more. *See* Final Act. 3, 5, 6. The Examiner expands on that analysis in the Answer, but Appellant does not respond to any of those specific findings in the Reply. *See* Ans. 4; Reply 1. The Examiner correctly interprets claim 1 to recite a system that comprises only a processor that is configured/programmed to perform several steps typically followed (individually and combined) in an authentication request. Ans. 4. The Examiner finds that the steps, considered as a combination, do not add anything additional/further than considering the limitations individually. *Id.*

Importantly, Appellant ignores the Examiner’s finding that the prior art also discloses checking for the presence of physical keys, in addition to the other routine processor limitations, and therefore fails to establish error in those findings. *See* Final Act. 3. Appellant relies heavily on an example from the December 2016 Guidelines in arguing that the claims must be considered as a whole, but the Examiner acknowledges this requirement throughout as noted above. To the extent that Appellant argues that the example *requires* a conclusion that “something more” is present in the claims at issue here, we disagree. Appellant provides no analysis of any particular claim or claim limitation, individually or considering the claim as a whole, and never quotes any of the relevant claim language in its argument, even after the Examiner pointed out this problem in the Answer. *See* Ans. 4 (“Appellant has provided no arguments or remarks specifying any particular word or phrase (i.e. meaningful limitation) that, in the combination with the whole, amounts to ‘significantly more.’”); Appeal Br. 4–6; Reply 1. Without any analysis of any claim language by Appellant, we are not apprised of error in the Examiner’s finding that the claim limitations, considered individually and as an ordered combination, fail to provide the “something more” to render the claims patent eligible.

Because we do not agree with Appellant that the Examiner failed to consider the claims as a whole, or otherwise erred in finding that the claims do not recite “something more” than the abstract idea, we sustain the rejection of claims 1–5, 9–11, and 13–16 under 35 U.S.C. § 101.

103 Rejection

Appellant separately argues independent claims 1 and 10, but does not separately argue any of the remaining claims subject to the § 103 rejection.

See Appeal Br. 6–9. We will therefore address claims 1 and 10 in turn below.

As to claim 1, the Examiner found that Kleve discloses most of the limitations, including the step of “wirelessly identify simultaneous presence of both a first vehicle key and a second vehicle key.” Final Act. 6–7. The Examiner found that Kleve discloses an RF module that wirelessly monitors for the presence of at least two vehicle keys. *Id.* at 7 (citing Kleve ¶¶ 71, 76). The Examiner further found that Harris discloses the “receive a pairing request” step, which was the only aspect of claim 1 that Kleve does not disclose. *See id.* The Examiner determined that it would have been obvious to modify “Kleve to grant/deny a pairing request as taught by Harris . . . since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods . . . , and the combination would have yielded predictable results.” *Id.*

Appellant argues that Harris only teaches allowing pairing if the key is inserted in the ignition, an active step taken by a user, which functions differently than the claimed, passive solution. Appeal Br. 7. Appellant maintains that even though Kleve teaches authentication based on the presence of two keys, “the Examiner cannot materially change the active (insertion based) solution of Harris to a passive one of Kle[v]e” because this “fundamentally alters how Harris works.” *Id.*

As the Examiner correctly points out in the Answer, the rejection only relies on Harris to teach a request for pairing. Ans. 7. The Examiner does not rely on the manner in which Harris pairs its device in any way, including insertion of the key. *See id.*; Final Act. 7. Because the Examiner relies entirely on Kleve for its authentication method that relies on the presence of

two or more vehicle keys, and relies in a limited way on Harris only for the pairing feature, we agree with the Examiner that the “means by which Harris detects key presence is wholly irrelevant.” Ans. 7. Nor do we find error in the proposed combination because of alleged problems with how Harris would work in the proposed combination. *See* Appeal Br. 7. The rejection proposes a modification of Kleve, not Harris, and therefore no alteration of Harris is contemplated. Based on the foregoing, we sustain the rejection of claim 1 under § 103, as well as independent claim 14, and their respective dependent claims 2–5, and 13–15.

As to claim 10, the Examiner again relies on Kleve as disclosing all of the limitations of the claim with the exception of the pairing request, and relies on Harris for the pairing limitation. *See* Final Act. 8–9. Claim 10, unlike claim 1, requires an additional authentication step—determining “that a predefined sequence of vehicle controls, whose primary function is other than that of pairing approval, has been actuated subsequent to detection of both keys.” Appeal Br., Claims App. 2. The Examiner found that Kleve discloses the limitation because it discloses the use of codes or a pattern of maneuvers as possible authentication steps. Final Act. 8 (citing Kleve ¶¶ 71–73). The Examiner construed “vehicle controls” to include “at least pressing buttons on a device or in the vehicle” and found that entering codes or a pattern of maneuvers in Kleve satisfies this limitation. Ans. 8 (citing Spec. ¶ 34; Kleve ¶¶ 71, 73).

Appellant argues that Kleve fails to disclose the limitation because the codes and maneuvers are not “vehicle controls.” Appeal Br. 8. Appellant also argues that even if Kleve’s HMI (Human Machine Interface) presents interactive graphics as the claimed “control,” it still fails to disclose the

claimed “sequence” and that the control has a different “primary function” than pairing approval. Reply Br. 3.

We are not persuaded that the Examiner erred in the rejection of claim 10 under § 103. Appellant’s own specification states that the second form of authentication that claim 10 refers to “can include, but is not limited to: pressing a pre-determined key or sequence on one or both of the fobs; . . . acknowledging pairing opportunity in center stack by clicking a modal or non-modal button on interface; pressing a specific sequence of keys in the vehicle; performing a fob utilization.” Spec. ¶ 34. In light of this limited detail in the specification, the Examiner properly construed the term “vehicle control” broadly to encompass at least pressing buttons in the vehicle. *See* Ans. 8. The Examiner also adequately supported the finding that Kleve’s paragraphs 71 and 73 disclose the limitation, given the similarity between that disclosure and Appellant’s own. *See id.* Kleve’s paragraph 71 discloses the use of “one or more codes (e.g., numeric, alphabetic, or alphanumeric)” or a “pattern of maneuvers.” Kleve ¶ 71. Kleve’s paragraph 73 discloses specific examples of the “code or maneuvers,” including input of “the code using the vehicle’s HMI (e.g., and without limitation, a touchscreen display, a microphone, one or more controls in the center stack, a vehicle keypad, and others).” *Id.* ¶ 73. This disclosure adequately supports the Examiner’s findings because it refers to “one or more codes” as well as multiple controls usable in sequence to provide further authentication. As to the “whose primary function is other than that of pairing approval” limitation, we disagree with Appellant’s argument that the HMI’s primary function is to pair devices, and view the HMI’s primary purpose as providing interaction with vehicle systems such as HVAC, audio, etc. *See id.*

The Examiner’s findings are consistent with the specification, given its lack of specificity in describing the claimed “sequence” as well as the “primary function” limitation. *See* Spec. ¶ 34 (referring without elaboration to “pressing a sequence of keys” and not explicitly describing the “primary function” limitation). In addition, Appellant does not provide us with a proposed claim construction, consistent with the specification, that does not read on Kleve’s disclosure. Based on the foregoing, we sustain the rejection of claim 10, and claim 11 that depends from claim 10.

DECISION

We affirm the decision of the Examiner to reject claims 1–5, 9–11, and 13–16.

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