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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BRETT A. KRUEGER

Appeal 2018-006225
Application 14/691,624
Technology Center 2100

Before JASON V. MORGAN, JON M. JURGOVAN,
and MICHAEL M. BARRY, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1–30, which constitute all pending claims. *See* Final Act. 1; Appeal Br. 13–21 (Claims App’x). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ We use “Appellant” to refer to the “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Kruevio LLC as the real party in interest. Appeal Br. 2.

Introduction

Appellant's "disclosure relates to suggesting activities to a user based on an assessment of the user's current state." Spec. ¶ 2.

Claim 1 is representative:

1. A method comprising:

[1] receiving, at a computing device, inputs indicative of a user state of a user, the received inputs comprising:

sensor inputs from one or more sensors in communication with the computing device; and/or

user inputs received from a graphical user interface;

[2] executing, by the computing device, a plurality of action evaluators, each action evaluator having a corresponding objective to promote or dissuade an action relative to the user, each action evaluator having an active state and an inactive state, each action evaluator associated with one or more input types that trigger the active state, each action evaluator remaining in the inactive state until triggered into the active state when one or more of the received inputs corresponds to the respective one or more input types associated with the respective action evaluator;

[3] determining, by the computing device, whether any of the action evaluators is in the active state; and

when any of the action evaluators is in the active state:

[4] determining, by the computing device, candidate actions based on the received inputs and the corresponding objective of each action evaluator in the active state, wherein each action evaluator in the active state evaluates each candidate action based on whether the candidate action promotes or achieves the corresponding objective of the respective action evaluator to render an evaluation;

[5] selecting, using the computing device, at least one suggested action from the candidate actions based on

the evaluations of each action evaluator in the active state; and

[6] executing or outputting, by the computing device, the at least one suggested action.

Appeal Br. 13–14 (Claims App’x) (bracketed reference numbers added).

References

Name	Reference	Date
Chau et al.	US 9,177,029 B1	Nov. 3, 2015
Majumdar et al.	US 2014/0100835 A1	Apr. 10, 2014
Chaudhri et al.	US 2013/0332721 A1	Dec. 12, 2013
Winstead et al.	US 2010/0302004 A1	Dec. 2, 2010

Rejections

Claims 1–30 stand rejected under 35 U.S.C. § 101 as directed to an abstract idea, without reciting significantly more. Final Act. 4–6.

Claims 1, 2, 7–12, and 17–30 stand rejected under 35 U.S.C. § 103 as unpatentable over Chau, Majumdar, and Chaudhri. *Id.* at 7–15.

Claims 3–6 and 13–16 stand rejected under 35 U.S.C. § 103 as unpatentable over Chau, Majumdar, Chaudhri, and Winstead. *Id.* at 15–18.

ANALYSIS

A. The § 101 Rejection

1. Principles of Law

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 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).

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*. *Id.* 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.” *See Alice*, 573 U.S. 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, 69 (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. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 176; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber

products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citing *Benson* and *Flook*); *see also id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

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

After the docketing of this Appeal, the PTO published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50–57 (Jan. 7, 2019) (“Guidance”).

Under the 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 interactions 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)).²

See Guidance, 84 Fed. Reg. at 52, 55–56. Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the office then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that are 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, 84 Fed. Reg. at 56.

2. *Analysis*

For the § 101 rejection, Appellant argues claims 1–30 together as a group. Appeal Br. 6–8. We select claim 1 as representative. 37 C.F.R. § 41.37(c)(1)(iv). We are not persuaded the Examiner erred in the § 101 rejection. As consistent with our discussion below, which primarily is for emphasis and clarification with respect to the Guidance, we adopt the Examiner’s eligibility-related findings and conclusions as our own.

(i) *Guidance Step 2A, Prong One*

For our prong one analysis, we put aside the generic limitations for performing the method using “a computing device” and “a graphical user interface,” which we consider in our prong two and *Alice/Mayo* step two (Guidance step 2B) analysis. Also, because claim 1 recites “and/or” for the two alternatives for the “received inputs comprising” limitation, we consider only the “user inputs received from a graphical user interface” alternative;

² All references to the MPEP are to Rev. 08.2017 (Jan. 2018).

i.e., we do not consider the “sensor inputs from one or more sensors in communication with the computing device” limitation.

Claim 1’s first step recites “receiving . . . inputs indicative of a user state of a user, the received inputs comprising . . . user inputs.” This is essentially the same as “receiving user inputs indicative of a user state.” These limitations, under their broadest reasonable interpretation, encompass the human activity of one person providing “user state” inputs (e.g., an input that indicates an emotional state or hunger status (*see* Spec. ¶¶ 54, 62)) to another person.

The second step recites

executing . . . a plurality of action evaluators, each action evaluator having a corresponding objective to promote []³ an action relative to the user, each action evaluator having an active state and an inactive state, each action evaluator associated with one or more input types that trigger the active state, each action evaluator remaining in the inactive state until triggered into the active state when one or more of the received inputs corresponds to the respective one or more input types associated with the respective action evaluator.

These limitations encompass human activity and/or mental processes, such as the activity of requesting advice from multiple people (providing “input” to the “evaluators”), which causes each human evaluator to consider the request (“triggers” them from an “inactive state” to the “active state”).⁴

Step three’s limitations of “determining . . . whether any of the action evaluators is in the active state” similarly encompasses human activity.

³ We redact “or dissuade,” which is unnecessary for the performance of claim 1.

⁴ With respect to the “objective to promote” limitation, we note people often have an objective to promote some particular action related to a request, e.g., because people often have an incentive or bias for promoting that action.

Continuing with the previous example, a person performs this step when they observe any of the human evaluators in the process of responding to the request for advice.

Claim 1's fourth step recites "determining . . . candidate actions based on the received inputs and the corresponding objective of each action evaluator in the active state, wherein each action evaluator in the active state evaluates each candidate action based on whether the candidate action promotes []⁵ the corresponding objective of the respective action evaluator to render an evaluation." This describes how the human evaluators (of the example discussed above) determine their responses. Thus, this step also encompasses human activity and/or mental processes.

Finally, the fifth and sixth steps recite "selecting . . . at least one suggested action from the candidate actions based on the evaluations of each action evaluator in the active state and "outputting . . . the at least one suggested action." Continuing with the human evaluators example, these steps encompass the activity of a person receiving multiple suggested recommendations from other people and stating her or his selection from those recommendations, i.e., a mental process and/or human activity.

As the Guidance explains, limitations such as the foregoing are abstract because they encompass (recite) concepts of (a) "observation, evaluation, judgement, opinion," which are mental processes, and (b) "managing personal behavior or relationships or interactions between people," which are in the category of certain methods of organizing human activity." Memorandum, 84 Fed. Reg. at 52. "Adding one abstract idea . . .

⁵ We redact "or achieves," which is unnecessary for the performance of claim 1.

to another abstract idea . . . does not render the claim non-abstract.” *RecogniCorp, LLC v. Nintendo Co. LTD.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (patent-ineligible claims recited and were directed to a combination of abstract ideas). Thus, claim 1 recites a judicial exception in the form of an abstract idea, and our analysis proceeds to prong two under the Guidance.

(ii) *Guidance Step 2A, Prong Two*

To determine whether this judicial exception is integrated into a practical application, we identify whether there are “*any additional elements recited in the claim beyond the judicial exception(s)*” and evaluate those elements to determine whether they integrate the judicial exception into a practical application. Guidance, 84 Fed. Reg. at 54–55 (emphasis added); *see also* MPEP § 2106.05(a)–(c), (e)–(h).

Here, the additional limitations in claim 1 are the requirements for performance of each step “by a computing device,” and for the receipt of user inputs “from a graphical user interface.” Claim 1 does not, however, recite any improvement to a computing device or to a graphical user interface, nor does claim 1 require any particular computing device or user interface. Instead, as the Examiner finds, and we agree, the underlying technology necessary to implement the functionality of the abstract limitations was well understood and basic. *See* Final Act. 6 *and* Ans. 4–7; *see also* Spec. ¶¶ 40–46 (broadly describing, in a non-limiting manner, exemplary standard technology for carrying out the method).

Thus, we determine claim 1 does not improve the functioning of a computer or any other technology or technical field, and neither does it

apply the judicial exception with any particular machine. *See* MPEP § 2106.05(a)–(b). Claim 1 also does not effect a particular transformation of any recited articles, which are used for their ordinary purposes, nor does it add any other meaningful (technological) limitations beyond “linking the use” of the method to generically recited technology; thus, the technological limitations amount to no more than instructions to implement the abstract idea using general computer-related technology. *See* MPEP § 2106.05(c), (e)–(f); *see also id.* at (g)–(h) (use of well-known limitations beyond the judicially excepted matter constitutes “insignificant extra-solution activity” (g) and claim limitations “merely indicating a field of use or technological environment in which to apply a judicial exception do not amount to significantly more” (h)). Thus, we conclude claim 1 does not integrate the recited judicial exception into a practical application and, accordingly, claim 1 is “directed to” its recited judicial exception. Guidance, 84 Fed. Reg. at 53.

(iii) *Guidance Step 2B*

In step 2B under the Guidance, we consider whether there are additional limitations that, individually or as an ordered combination, ensure the claims amount to “significantly more” than the abstract idea. *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 72–73, 77–79). As stated in the Guidance, many of the considerations to determine whether the claims amount to “significantly more” under step two of the *Alice* framework are already considered as part of determining whether the judicial exception has been integrated into a practical application. Guidance, 84 Fed. Reg. at 56. Thus, at this point of our analysis, we determine if claim 1 adds a specific limitation, or combination of limitations, that is not well-understood, routine,

conventional activity in the field; or whether, in addition to the recited judicial exception, they recite only well-understood, routine, conventional activities at a high level of generality. *Id.*

Here, beyond the limitations describing the abstract idea, claim 1 does not recite any limitations (or combination of limitations) that are not well-understood, routine, and conventional. The Examiner finds, and we agree, that the additional limitations constitute use of technology that was well known to those of ordinary skill prior to the invention. Final Act. 6. Appellant discloses and discusses the technology relevant to the claims at a generic level. *See, e.g.*, Spec. ¶¶ 3, 40–47. There is no discussion of any special functionality or considerations for a technological aspect of any technological component recited in the independent claims. Thus, Appellant’s contention that the Examiner errs because claim 1 recites “*clear and specific technological details for carrying out the invention*” (Reply Br. 2) is unpersuasive. Also unpersuasive is Appellant’s contention that claim 1, “**as a whole** presents a technological improvement in the field of executing context-relevant actions relative to a current state of a user.” Appeal Br. 6. The premise of this contention is flawed, because claim 1 requires “executing *or* outputting” a suggested (context-relevant) action.

Appellant also contends that, similar to the patent eligible claim at issue in *DDR Holdings*,⁶ claim 1 is “necessarily rooted in computer technology.” Appeal Br. 6; *see also id.* at 7 (arguing “receiving user inputs from a GUI clearly ties the claims to computer use” and “executing on a computing device a plurality of action evaluators that each remain inactive until triggered into the active state by receipt of an input . . . having an input

⁶ *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014).

type associated with the respective action evaluator necessarily roots the claimed invention in computer technology”). This contention is unpersuasive. The claim at issue in *DDR Holdings* recited specific hyperlink technology to accomplish a result to address a technological challenge “arising from” the Internet that did not have a non-technological analogue. *See* 773 F.3d at 1258–59. Appellant’s claim 1 merely recites using generic GUI and computing device technology for their basic and ordinary purposes. Moreover, the claimed use of “triggers” merely limits the scope of underlying abstract idea without representing an *additional* recitation that transforms the abstract idea into a patent-eligible invention by, e.g., necessarily rooting the claimed invention in computer technology.

Appellant also unpersuasively argues *McRO*⁷ and *Enfish*⁸ compels a determination that claim 1 is patent eligible because it is “specifically designed to achieve a technological improvement in the field of executing context-relevant actions relative to a current state of a user and [is] not directed to a result or effect that itself is an abstract idea or merely invokes generic processes and machinery.” Appeal Br. 7–8 (also citing Spec. ¶¶ 2, 71). *McRO* provided a particular technical solution using phoneme streams to a particular technical problem with computer animation and *Enfish* entailed claims directed to an improved use of a particular use of database technology (self-referential databases). Appellant’s claim 1 offers no such technological feature.

⁷ *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016).

⁸ *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016).

Appellant’s reliance on *Berkheimer* is also misplaced. *See* Reply Br. 2–3. The exemplary claim limitation at issue in *Berkheimer* was “storing a reconciled object structure in the archive without substantial redundancy,” which the court found was “directed to [an] arguably unconventional inventive concept described in the specification.” 881 F.3d at 1370. There was *no* evidence in the record that this limitation described well-understood, routine, and conventional technology. *Id.* at 1368. The *Berkheimer* court held there was a “genuine issue of material fact” and that “fact questions created by the specification’s disclosure” precluded summary judgment of invalidity under step two of the *Alice/Mayo* framework. *Id.* Here, however, as discussed above, the only limitations not reciting a part of the abstract idea are “a computing device” and “a graphical user interface.” The Examiner made a finding in the record that this technology is well-understood, routine and conventional. Final Act. 6. Thus, *Berkheimer* is inapposite, because the record before us (including, as discussed above, Appellant’s Specification) supports the finding that, beyond the abstract idea, claim 1 recites only well-understood, routine, and conventional technology.

(iv) § 101 Conclusion

Accordingly, we sustain the § 101 rejection of claims 1–30.

B. The § 103 Rejections

Appellant argues claims 1, 2, 7–12, and 17–30 together as a group, and presents no substantively separate arguments for claims 3–6 and 13–16. Appeal Br. 8–10. We select independent claim 1 as representative of all pending claims for the § 103 rejections. 37 C.F.R. § 41.37(c)(1)(iv).

We have reviewed the Examiner's § 103 rejection of claim 1 in light of Appellant's contentions of reversible error. We disagree with Appellant's conclusions. Instead, as consistent with our discussion below, we adopt the Examiner's findings and reasons as set forth in the Final Office Action from which this appeal is taken and as set forth in the Answer. We highlight the following for emphasis.

Appellant contends Chau “never considers executing a plurality of evaluators” and “fails to disclose or suggest executing a plurality of action evaluators, each action evaluator having a corresponding objective to promote or dissuade an action relative to a user.” Appeal Br. 8. The rejection, however, does not rely on Chau for teaching a plurality of action evaluators. Final Act. 9 (explaining that “while Chau allows for numerous activities, Chau does not explicitly teach *a plurality of action evaluators*”). The Examiner finds Majumdar teaches the recited plurality action evaluators. *Id.* One cannot show nonobviousness by attacking references individually when the rejection is based on a combination of references. *In re Merck & Co. Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). The relevant inquiry is whether the claimed subject matter would have been obvious to those of ordinary skill in the art in light of the *combined teachings* of those references. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Appellant also contends that because “Chau's ‘activity assistant’ (singular) scores every activity,” Chau's activity assistant “cannot have an inactive state,” as recited. Appeal Br. 8. Appellant further contends that modifying Chau so as “not [to] evaluate the activities while in an inactive state” would change Chau's principle of operation and render Chau unsatisfactory for its intended purpose. *Id.* at 8–9. These arguments are also

unpersuasive. The rejection does not propose to modify Chau’s “singular” activity assistant to have an inactive state. As discussed above, the rejection first modifies Chau’s activity assistant to include a plurality of action evaluators, as taught by Majumdar. The rejection then relies on Chaudhri to modify the plurality of action evaluators, as taught by the combination of Chau and Majumdar, so that “each action evaluator ha[s] an active state and an inactive state,” as recited. Final Act. 9–10. Thus, the premise of Appellant’s argument—that it would render Chau unsatisfactory for its intended purpose and change its principle of operation to modify Chau’s “singular” activity assistant to use active/inactive states—is flawed. The rejection does not propose to modify Chau’s “singular” activity assistant to have active/inactive states.

Appellant further contends that Chau fails to teach claim 1’s recited step of

determining . . . candidate actions based on the received inputs and the corresponding objective of each action evaluator in the active state, wherein each action evaluator in the active state evaluates each candidate action based on whether the candidate action promotes or achieves the corresponding objective of the respective action evaluator to render an evaluation,

because “Chau’s activity assistant neither considers specific objectives of action evaluators in the active state nor renders evaluations accordingly.”

Appeal Br. 9. This is unpersuasive, because the rejection does not find that Chau’s activity assistant teaches all features argued by Appellant. *Merck*, 800 F.2d at 1097; *Keller*, 642 F.2d at 425. In particular, as discussed above, the rejection relies on Majumdar (in view of Chau) for teaching multiple evaluators and on Chaudhri (in view of Chau and Majumdar) for teaching active and inactive states for each evaluator.

Appellant further argues:

neither Chau nor [Majumdar], separately or in combination disclose executing a plurality of action evaluators, *where each action evaluator has an active state and an inactive state, each action evaluator is associated with one or more input types that trigger the active state, and each action evaluator remains in the inactive state until triggered into the active state when one or more of the received inputs corresponds to the respective one or more input types associated with the respective action evaluator.*

Appeal Br. 9–10 (emphasis added). This is unpersuasive because the rejection relies on Chaudhri for teaching the argued features shown in italics in the foregoing quote.

Appellant further contends that because “Chaudhri never considers the concept of multiple action evaluators as claimed,” necessary modifications of Chaudhri necessary would render it unfit “for its intended purpose and would change its principle of operation” and, thus, “Chaudhri fails to cure the deficiencies of Chau and [Majumdar].” Appeal Br. 10. This argument is unpersuasive. The rejection does not propose to modify the teachings of Chaudhri. Instead, as discussed above, the rejection uses the teachings of Chaudhri to modify the combined teachings of Chau and Majumdar.

Appellant also argues that “[w]ithout citing any motivations within the references, the Examiner attempts to modify the cited references using impermissible hindsight.” Reply Br. 3 (contending the Examiner “mak[es] a number of technological leaps”). Appellant further argues the Examiner “fails to cite any motivation in the references” to modify the combined teachings of Chau and Majumdar with Chaudhri’s “teaching [of] turning on/off specific actions.” *Id.* These arguments are unpersuasive.

“Any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made and does not include knowledge gleaned only from applicant’s disclosure, such a reconstruction is proper.” *In re McLaughlin*, 433 F.2d 1392, 1395 (CCPA 1971). Further, while a reason to combine teachings from the prior art “may be found in explicit or implicit teachings within the references themselves,” it also may come from “the ordinary knowledge of those skilled in the art, or from the nature of the problem to be solved.” *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1355 (Fed. Cir. 1999) (citing *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998)); *see also Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009) (explaining that “an analysis of obviousness . . . may include recourse to logic, judgment, and common sense available to the person of ordinary skill that do not necessarily require explication in any reference”).

Ultimately, “rejections on 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.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (quoting *Kahn*). Here, consistent with *Kahn* and *KSR*, the Examiner persuasively explains why ordinarily skilled artisans would have been motivated to combine and modify the references as proposed:

One of ordinary skill in the art at the time the invention was filed would have been motivated to combine Chau with the multiple evaluators of Majumdar, with such a modification

being obvious because both references predict and recommend activities to a user based on various inputs, and Majumdar enhances the user experience by taking into account a variety of factors to best recommend and predict activities.

One of ordinary skill in the art at the time the invention was filed would have been motivated to combine Chau with the activity states of Chaudhri, with such a modification being obvious because both references predict and recommend activities to a user based on various inputs, and Chaudhri enhances the user experience by improving user feedback options when deciding activities.

Final Act. 9, 10 (citing Chau 5:11–57, 6:3–15, 12:16–51, 15:4–33, Figs. 3A–B, 5; Majumdar ¶¶ 32–35; Fig. 4; Chaudhri ¶¶ 21–23, 35–37, 42–44, Figs. 1A–5).

Regarding the technological issues Appellant raises regarding the combination and modification of the references as proposed by the Examiner, we note “[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.” *Keller*, 642 F.2d at 425 (citations omitted); *see also In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973) (“Combining the teachings of references does not involve an ability to combine their specific structures.”) (emphasis omitted). In view of the “inferences and creative steps that a person of ordinary skill in the art would employ” (*KSR*, 550 U.S. at 418), Appellant does persuade us that combining the teachings of Chau, Majumdar, and Chaudhri as proposed by the Examiner would have been uniquely challenging or otherwise unobvious. *See Leapfrog Enters. Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418–19). Nor has Appellant provided objective evidence of secondary considerations which our reviewing court guides “operates as a

beneficial check on hindsight.” *Cheese Sys., Inc. v. Tetra Pak Cheese and Powder Sys.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013). We are persuaded the claimed subject matter exemplifies the principle that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416.

Accordingly, we sustain the § 103 rejection of claims 1 and 11. We also, accordingly, sustain the § 103 rejections of claims 2–10 and 12–30, for which Appellant proffers no argument substantively separate from the independent claims.

DECISION

We affirm the Examiner’s 35 U.S.C. § 101 rejection of claims 1–30.

We affirm the Examiner’s 35 U.S.C. § 103 rejection of claims 1–30.

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–30	101	Nonstatutory Subject Matter	1–30	
1, 2, 7–12, 17–30	103	Chau, Majumdar, Chaudhri	1, 2, 7–12, 17–30	
3–6, 13–16	103	Chau, Majumdar, Chaudhri, Winstead	3–6, 13–16	
Overall Outcome			1–30	

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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