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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHRISTOPHER J. MERZ

Appeal 2019-000940
Application 13/218,177
Technology Center 3600

Before MAHSHID D. SAADAT, BETH Z. SHAW, and ALEX S. YAP,
Administrative Patent Judges.

SHAW, *Administrative Patent Judge.*

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant,¹ Christopher J. Merz, appeals from the Examiner’s decision to reject claims 1–26. Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as MasterCard International Incorporated. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to redemption preference profiling of a cardholder within a payment network. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A computer-based method for managing a predictive redemption profile for a cardholder as a portion of a loyalty profile of the cardholder, the cardholder having an account associated with a payment card, the payment card issued by an issuer and registered in a payment card network to the cardholder, said method performed using a payment network computer coupled to a database, the payment network computer including a profile wrapper component and a profile event loop component, said method comprising:

assigning an industry identifier to each respective reward item and purchase item being processed over the payment card network, the industry identifier identifying an industry segment;

electronically receiving, using a transaction gatherer component embedded within the profile wrapper component, purchase transaction information for the cardholder for purchases made by the cardholder with a merchant and initiated by the cardholder using the payment card, wherein the purchase transaction information includes purchase items purchased by the cardholder and associated industry identifiers;

electronically receiving, using the transaction gatherer component, redemption transaction information for the cardholder, wherein the redemption transaction information includes historical reward items previously selected by the cardholder and associated industry identifiers, and wherein the redemption transaction information is different than the purchase transaction information;

electronically storing the purchase transaction information and the redemption transaction information within the database; generating, by the profile event loop component, a plurality of redemption preference models each including one or more computer code segments configured to generate a redemption profile for the cardholder and a respective reward item ID assigned to each of the reward items having been redeemed by

the cardholder in the stored redemption transaction information, wherein the respective assigned reward item IDs are associated with the corresponding ones of the assigned industry identifiers within each of the plurality of redemption preference models;

correlating, for each of the plurality of redemption preference models, a cardholder spend pattern from the purchase transaction information with a cardholder redemption usage pattern from the redemption transaction information, the cardholder redemption usage pattern including at least one archived cardholder profile snapshot matching a particular assigned reward ID with a particular industry identifier;

ranking the plurality of redemption preference models based, at least in part, on a predictive performance of each redemption preference model, each predictive performance utilizing one or more archived cardholder profile snapshots;

selecting one or more of the ranked redemption preference models exhibiting highest relative industry redemption preferences;

generating the predictive redemption profile, by the profile event loop component, for the cardholder using the one or more selected ranked redemption preference models, wherein the predictive redemption profile includes the assigned reward items and is based at least in part on the stored purchase transaction information and the stored redemption transaction information for the cardholder, the predictive redemption profile representing a relative redemption preference of the cardholder, and wherein the predictive redemption profile is configured to indicate the relative redemption preference of the cardholder for the assigned industry identifier as compared to all other industry identifiers of the plurality of redemption preference models, respectively;

comparing a current cardholder profile snapshot with one or more archived cardholder profile snapshots in the generated predictive redemption profile; and

recommending, by the payment network computer, a new reward item for the cardholder based on the profile snapshot comparison and availability of the new reward item among one or more of the highest ranking industries from the ranked redemption preference models.

REJECTIONS

Claims 1–26 are rejected under 35 U.S.C. § 101.

Claims 1–26 are rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Sickel et al. (US 2006/0271432 A1, published Nov. 30, 2006), Chu (US 2012/0123835 A1, published May 17, 2012), and Ariff et al. (US 7,613,628 B2, issued Nov. 3, 2009). Final Act. 9.

OPINION

SECTION 101 REJECTION

Appellant argues the § 101 rejection of claims 1–26 as a group. *See* Appeal Br. 8–18. As permitted by 37 C.F.R. § 41.37, we decide this issue based on claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2016).

Section 101 of the Patent Act provides that “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” is patent eligible. 35 U.S.C. § 101. But the Supreme Court has long recognized an implicit exception to this section: “Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). To determine whether a claim falls within one of these excluded categories, the Court has set out a two-part framework. The framework requires us first to consider whether the claim is “directed to one of those patent-ineligible concepts.” *Alice*, 573 U.S. at 217. If so, we then examine “the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*

Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66, 78, 79 (2012)). That is, we examine the claims for an “inventive concept,” “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.’” *Alice*, 573 U.S. at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

The Patent Office recently issued guidance about this framework. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Eligibility Guidance”). Under the guidance, to decide whether a claim is “directed to” an abstract idea, we evaluate whether the claim (1) recites an abstract idea grouping listed in the guidance *and* (2) fails to integrate the recited abstract idea into a practical application. *See* 2019 Eligibility Guidance, 84 Fed. Reg. at 51. If the claim is “directed to” an abstract idea, as noted above, we then determine whether the claim recites an inventive concept. The 2019 Eligibility Guidance explains that when making this determination, we should consider whether the additional claim elements add “a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field” or “simply append[] well-understood, routine, conventional activities previously known to the industry.” 2019 Eligibility Guidance, 84 Fed. Reg. at 56.

With these principles in mind, we turn to the Examiner’s § 101 rejection.

Abstract idea

Turning to Step 2A, Prong 1, the claimed method is for developing a redemption preference profile for a cardholder. Spec. ¶ 1. Claim 1 includes the following limitations, emphasized in italics:

assigning an industry identifier to each respective reward item and purchase item being processed over the payment card network, the industry identifier identifying an industry segment;

electronically receiving, using a transaction gatherer component embedded within the profile wrapper component, purchase transaction information for the cardholder for purchases made by the cardholder with a merchant and initiated by the cardholder using the payment card, wherein the purchase transaction information includes purchase items purchased by the cardholder and associated industry identifiers;

electronically receiving, using the transaction gatherer component, redemption transaction information for the cardholder, wherein the redemption transaction information includes historical reward items previously selected by the cardholder and associated industry identifiers, and wherein the redemption transaction information is different than the purchase transaction information;

electronically storing the purchase transaction information and the redemption transaction information within the database;

generating, by the profile event loop component, a plurality of redemption preference models each including one or more computer code segments configured to generate a redemption profile for the cardholder and a respective reward item ID assigned to each of the reward items having been redeemed by the cardholder in the stored redemption transaction information, wherein the respective assigned reward item IDs are associated with the corresponding ones of the assigned industry identifiers within each of the plurality of redemption preference models;

correlating, for each of the plurality of redemption preference models, a cardholder spend pattern from the purchase transaction information with a cardholder redemption usage pattern from the redemption transaction information, the cardholder redemption usage pattern including at least one archived cardholder profile snapshot matching a particular assigned reward ID with a particular industry identifier;

ranking the plurality of redemption preference models based, at least in part, on a predictive performance of each

redemption preference model, each predictive performance utilizing one or more archived cardholder profile snapshots;

selecting one or more of the ranked redemption preference models exhibiting highest relative industry redemption preferences;

generating the predictive redemption profile, by the profile event loop component, for the cardholder using the one or more selected ranked redemption preference models, wherein the predictive redemption profile includes the assigned reward items and is based at least in part on the stored purchase transaction information and the stored redemption transaction information for the cardholder, the predictive redemption profile representing a relative redemption preference of the cardholder, and wherein the predictive redemption profile is configured to indicate the relative redemption preference of the cardholder for the assigned industry identifier as compared to all other industry identifiers of the plurality of redemption preference models, respectively;

comparing a current cardholder profile snapshot with one or more archived cardholder profile snapshots in the generated predictive redemption profile; and

recommending, by the payment network computer, a new reward item for the cardholder based on the profile snapshot comparison and availability of the new reward item among one or more of the highest ranking industries from the ranked redemption preference models.

Claim 1 recites an abstract idea grouping listed in the 2019 Eligibility Guidance: “mental processes.” *See* 2019 Eligibility Guidance, 84 Fed. Reg. at 52, 53 (listing “[m]ental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion)” as one of the “enumerated groupings of abstract ideas” (footnote omitted)). The guidance explains that “mental processes” include acts that people can perform in their minds or using pen and paper, even if the claim recites that a generic computer component performs the acts. *See* 2019 Eligibility

Guidance, 84 Fed. Reg. at 52 n.14 (“If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind.”); *see also Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) (“[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.”), *quoted in* 2019 Eligibility Guidance, 84 Fed. Reg. at 52 n.14; *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324 (Fed. Cir. 2016) (holding that computer-implemented method for ““anonymous loan shopping”” was an abstract idea because it could be “performed by humans without a computer”); *quoted in* 2019 Eligibility Guidance, 84 Fed. Reg. at 52 n.14.

The method recited in claim 1 executes steps that people can perform in their minds or using pen and paper. A person can perform the italicized steps of claim 1 by using his or her mind (or pen and paper) in the claimed manner. For example, a person can “*assign[] an industry identifier to each respective reward item and purchase item,*” “*the industry identifier identifying an industry segment,*” using pen and paper. As another example, a person can “*compar[e] a current cardholder profile snapshot with one or more archived cardholder profile snapshots in the generated predictive redemption profile*” using his or her mind or pen and paper. Accordingly, claim 1 recites a mental process, and thus an abstract idea.

Turning to Step 2A, Prong 2, the remaining elements recited in claim 1 do not integrate the abstract idea into a practical application. In addition to

the steps discussed above, claim 1 recites a “payment card,” a “payment card network” a “payment network computer” and various components embedded or included in the payment network computer (i.e., profile event loop component, transaction gatherer component.) The recited card, network, and computer encompass generic components. *See, e.g.*, Spec. ¶ 39 (“As described herein, the term ‘financial transaction card’ or ‘payment card’ includes cards such as credit cards, debit cards, and prepaid cards, but also includes any other devices that may hold payment account information, such as mobile phones, personal digital assistants (PDAs), and key fobs.”) ¶¶ 40–43 (describing generic networks, computers, and databases). Programming a general-purpose computer to perform abstract ideas does not integrate those ideas into a practical application. *See* 2019 Eligibility Guidance, 84 Fed. Reg. at 55 (identifying “merely includ[ing] instructions to implement an abstract idea on a computer” as an example of when an abstract idea has not been integrated into a practical application).

We are not persuaded that the claimed “payment card network” is a specialized, non-generic network, despite Appellant’s argument to the contrary (Appeal Br. 16, 17), because there is no persuasive evidence on this record to substantiate Appellant’s contention. Although Appellant points us to paragraph 34 of the Specification, which describes a “multi-party payment card industry system,” the term “payment card network” is not mentioned in paragraph 34. Moreover, paragraphs 40 through 43 describe Figure 2, “an exemplary payment card system 100,” which includes client systems 114 that “are interconnected to the Internet through many interfaces including a network, such as a local area network (LAN) or a wide area network

(WAN), dial-in-connections, cable modems and special high-speed ISDN lines.” Spec. ¶ 41.

We are not persuaded that the claimed invention improves the computer or its components’ functionality or efficiency, or otherwise changes the way those devices function, at least in the sense contemplated by the Federal Circuit in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), despite Appellant’s arguments to the contrary (Appeal Br. 14). The claimed self-referential table in *Enfish* was a specific type of data structure designed to improve the way a computer stores and retrieves data in memory. *Enfish*, 822 F.3d at 1339. To the extent Appellant contends that the claimed invention uses such a data structure to improve a computer’s functionality or efficiency, or otherwise change the way that device functions, there is no persuasive evidence on this record to substantiate such a contention.

Appellant’s reliance on *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016) (Appeal Br. 15; Reply Br. 3) is also unavailing. There, the court held eligible claims directed to a technology-based solution to filter Internet content that overcame existing problems with other Internet filtering systems by making a known filtering solution—namely a “one-size-fits-all” filter at an Internet Service Provider (ISP)—more dynamic and efficient via individualized filtering at the ISP. *BASCOM*, 827 F.3d at 1351. Notably, this customizable filtering solution improved the computer system’s performance and, therefore, was patent-eligible. *See id.* But unlike the filtering system improvements in *BASCOM* that added significantly more to the abstract idea in that case, the claimed

invention here uses generic computing components to implement an abstract idea.

Appellant's reliance on *Thales Visionix Inc. v. United States*, 850 F.3d 1343 (2017) (Appeal Br. 9; Reply Br. 2) is likewise unavailing. There, the court held eligible claims reciting determining an orientation of an object relative to a moving reference frame based on signals from two inertial sensors mounted respectively on the object and on the moving reference frame. *Thales Visionix*, 850 F.3d at 1345–49. In reaching its eligibility conclusion, the court noted that the claimed invention used inertial sensors in an unconventional manner to reduce errors in measuring a moving object's relative position and orientation on a moving reference frame. *Id.* at 1348–49.

That is not the case here. To the extent that Appellant contends that the claimed invention is directed to such improvements in computer capabilities (*see* Appeal Br. 9; Reply Br. 2), there is no persuasive evidence on this record to substantiate such a contention.

Nor is this invention analogous to that which the court held eligible in *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) despite Appellant's arguments to the contrary (Appeal Br. 12; Reply Br. 2). There, the claimed process used a combined order of specific rules that rendered information in a specific format that was applied to create a sequence of synchronized, animated characters. *McRO*, 837 F.3d at 1315. Notably, the recited process *automatically animated characters* using particular information and techniques—an improvement over manual three-dimensional animation techniques that was not directed to an abstract idea. *Id.* at 1316.

But unlike the claimed invention in *McRO* that improved how the physical display operated to produce better quality images, the claimed invention here merely uses generic computing components to manage a predictive redemption profile for a cardholder. This generic computer implementation is not only directed to a mental process, but also does not improve a display mechanism as was the case in *McRO*. *See SAP Am. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (distinguishing *McRO*).

Thus, the claims do not integrate the judicial exception into a practical application. The claims do not (1) improve the functioning of a computer or other technology, (2) are not applied with any particular machine (except for a generic computer), (3) do not effect a transformation of a particular article to a different state, and (4) are not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. *See MPEP* §§ 2106.05(a)–(c), (e)–(h). We, therefore, agree with the Examiner that claim 1 is directed to an abstract idea.

Inventive Concept

Because we determine claim 1 is “directed to” an abstract idea, we consider whether claim 1 recites an “inventive concept” pursuant to Step 2B of the 2019 Eligibility Guidance. The Examiner determined claim 1 does not recite an inventive concept because the additional elements in the claim do not amount to “significantly more” than an abstract idea. *See Final Act*. 4, 5.

We agree with the Examiner’s determination. As noted above, the claimed invention merely uses generic computing components to implement the recited abstract idea. The additional elements recited in the claim include the “payment card,” “payment card network,” “payment network computer,” and various components embedded or included in the payment network computer (i.e., profile event loop component, transaction gatherer component.) The claim recites these elements at a high level of generality, and the written description indicates that these elements are generic computer components. *See, e.g.*, Spec. ¶¶ 39–43. Using generic computer components to perform abstract ideas does not provide the necessary inventive concept. *See Alice*, 573 U.S. at 223 (“[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”). Thus, these elements, taken individually or together, do not amount to “significantly more” than the abstract ideas themselves.

Appellant contends various elements recited in the claim provide the necessary inventive concept. Appeal Br. 14–18. But these elements form part of the recited abstract ideas and thus are not “additional elements” that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78); *see also* 2019 Eligibility Guidance, 84 Fed. Reg. at 55 n.24 (“USPTO guidance uses the term ‘additional elements’ to refer to claim features, limitations, and/or steps that are recited in the claim *beyond the identified judicial exception.*” (Emphasis added)).

Rather, the recited “payment card,” “payment card network,” and “payment network computer” are the additional recited elements whose

generic computing functionality is well-understood, routine, and conventional. *See Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1368 (Fed. Cir. 2015) (noting that a recited user profile (i.e., a profile keyed to a user identity), database, and communication medium are generic computer elements); *Mortg. Grader*, 811 F.3d at 1324–25 (noting that components such as an “interface,” “network,” and “database” are generic computer components that do not satisfy the inventive concept requirement). *Accord* Final Act. 4, 5 (concluding that the claims’ additional generic computer components do not add significantly more than the abstract idea.). Appellant’s arguments do not persuade us claim 1 is “directed to” a patent-eligible concept.

To the extent Appellant contends that the claimed invention is rooted in technology because it is ostensibly directed to a technical solution (*see* Appeal Br. 14–18), we disagree. Even assuming, without deciding, that the claimed invention can create a predictive redemption profile for a cardholder faster than doing so manually, any speed increase comes from the capabilities of the generic computer components—not the recited process itself. *See FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016) (citing *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.”)); *see also Intellectual Ventures I LLC v. Erie Indemnity Co.*, 711 F. App’x 1012, 1017 (Fed. Cir. 2017) (unpublished) (“Though the claims purport to accelerate the process of finding errant files and to reduce error, we have held that speed and accuracy increases stemming from the ordinary

capabilities of a general-purpose computer ‘do[] not materially alter the patent eligibility of the claimed subject matter.’”). Like the claims in *FairWarning*, the focus of claim 1 is not on an improvement in computer processors as tools, but on certain independently abstract ideas that use generic computing components as tools. *See FairWarning*, 839 F.3d at 1095 (citations and quotation marks omitted).

For at least the above reasons, we agree with the Examiner that claim 1 is “directed to” an abstract idea and does not recite an “inventive concept.” Accordingly, we sustain the Examiner’s rejection of the pending claims under 35 U.S.C. § 101.

SECTION 103 REJECTION

Regarding the § 103 rejection, we are not persuaded by Appellant’s arguments with respect to claim 1 for the reasons identified by the Examiner in the final rejection and Answer. Appellant argues the references do not teach “the receipt of **redemption** information, or redemption transaction information, separately from the receipt of *purchase* transaction information.” Appeal Br. 18, 19; Reply Br. 4. Appellant does not appear to dispute that Sickel teaches receiving redemption information, but argues Sickel does not teach receiving purchase transaction information. *Id.* We agree with the Examiner’s findings, however, that Sickel teaches receiving purchase transaction information because Sickel teaches the redemption vehicle is “loaded with points” and that the “points can be obtained from one merchant.” Sickel ¶ 4. These points are earned by purchase transaction information. *Id.* ¶ 2 (rewards can be provided “via purchases” on a co-branded credit card); Final Act. 10.

Appellant acknowledges Sickel discloses a reward point system that generates a “redemption profile.” Appeal Br. 19. Yet, Appellant argues “Sickel’s redemption profile merely specifies the type of universal redemption vehicle that should be configured (e.g., points, currency, applicable merchants, etc.), but does not teach or suggest that individual reward items **are each assigned industry identifiers**, as erroneously asserted in the rejection.” *Id.* We are not persuaded by this argument because Sickel explains that points “can be redeemed at any merchant in the selected industry vertical” and that the industry vertical may include, for example, lodging, retail, airlines, car rentals, and other examples of industry identifiers. Sickel ¶ 4; Ans. 10. These are examples of industry identifiers.

Appellant also argues “Sickel also fails to teach or suggest that **each redeemed reward item is assigned its own reward item ID** that is then **matched with a particular industry identifier in an archived cardholder profile snapshot.**” Appeal Br. 19. Yet, as the Examiner explains, Sickel teaches each redeemed award is matched or recommended, and this matching is done based on the redemption profile, where Sickel teaches that the profile includes the industry vertical. Ans. 11 (citing Sickel ¶ 4, Figs. 1–5). As discussed above, the industry vertical includes the industry identifiers.

Appellant argues “Chu is completely silent regarding payment card holders or issuers, and also regarding any predictive profiles for an individual cardholder, whether for purchase transaction usage or redemption transaction usage.” Appeal Br. 20. The Examiner finds, and we agree, that Chu is used to teach creating a reward catalog for a user and recommending rewards to individuals automatically and with an autosuggest feature. Ans. 12 (citing Chu ¶ 56); Final Act. 13–15. To the extent Appellant contends

that Chu does not teach the disputed elements, there is no persuasive evidence on this record to substantiate such a contention.

We find unavailing Appellant's contention that Chu's "algorithm" cannot be modified to be relevant to the pending claims. Appeal. Br. 20. Not only is this contention unsubstantiated by any persuasive evidence on this record, it is well settled that "a determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements." *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012) (citations omitted). Nor is the test for obviousness whether a secondary reference's features can be bodily incorporated into the structure of the primary reference. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *Id.* And here, the Examiner's proposed combination uses prior art elements predictably according to their established functions to yield a predictable result. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). Therefore, the Examiner's proposed combination of the cited references is supported by articulated reasoning with some rational underpinning to justify the Examiner's obviousness conclusion.

Regarding Ariff, Appellant argues "Ariff is silent regarding any database technique that includes the generation of a predictive redemption profile, or more particularly, the generation of a predictive redemption profile that includes a comparison of a current cardholder profile snapshot with an archived cardholder profile snapshot." Appeal Br. 22. In particular, Appellant argues Ariff merely uses conventional SKU data and is "silent

regarding any predictive data analysis specifically for a redemption profile of a loyalty system.” *Id.* at 22–22.

The Examiner points out that Sickel, not Ariff, is used to teach the claimed “associating within the database a reward item ID with the corresponding assigned industry identifier.” Ans. 13. The Examiner finds, and we agree, that Ariff teaches correlating a part of a consumer profile and a consumer profile, which teaches the claimed comparing. Ans. 13, 14 (citing Ariff 13:5–14:14 (“correlate any of the following: a consumer profile, a part of a consumer profile, a supplementary member profile . . . purchase data . . . or the like.”)). Appellant provides insufficient evidence that the Specification or claims limit the claimed “comparing” in a way that, under a broad but reasonable interpretation, is not encompassed by Ariff’s correlating.

Additionally, Appellant argues the rejection fails to identify any teaching, suggestion from the references themselves to combine Sickel, Chu, and Ariff. Appeal Br. 22; Reply Br. 4. While it is often necessary for an Examiner to identify a reason for combining familiar elements obtained from the prior art in establishing a *prima facie* case of obviousness, the identification of such a reason is not a *sine qua non* requirement. *See KSR*, 550 U.S. at 418–19. So long as the Examiner provides an articulated reasoning with some rational underpinning to substantiate the obviousness rejection, such a conclusion is proper. *See id.* at 418. In this case, the Examiner provided more than just a mere conclusory statement. The Examiner states that it would have been obvious to an ordinarily skilled artisan at the time of the claimed invention to combine Sickel and Chu “to retain cardholder and cardholder satisfaction via improved targeting of

cardholder preferred rewards” (Final Act. 15, 16), and further explains that it would have been obvious to include the identified features of Ariff “to maintain a competitive system at the time of the invention, since other marketing entities would be using said features to improve targeting advertising to users.” Final Act. 20. Such a statement suffices as an articulated reason with some rational underpinning to support the proffered combination.

Moreover, such a combination is an obvious predictable variation of known elements. “The 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. “If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.” *Id.* at 417. The ordinarily-skilled artisan, being “a person of ordinary creativity, not an automaton,” would be able to fit the teachings of Sickel, Chu, and Ariff together like pieces of a puzzle to predictably result in the claimed invention. *Id.* at 420–21. Because Appellant has not demonstrated that the proposed combination would have been “uniquely challenging or difficult for one of ordinary skill in the art,” the proposed modification would have been well within the purview of the ordinarily skilled artisan. *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418).

Absent persuasive rebuttal, it follows that the Examiner has not erred in concluding that the combination of Sickel, Chu, and Ariff renders independent claim 1 obvious.

CONCLUSION

The Examiner’s rejection is affirmed.

More specifically,

CONCLUSION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-26	§ 101	Eligibility	1-26	
1-26	§ 103	Sickel, Chu, Ariff	1-26	
Overall Outcome			1-26	

FINALITY AND RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED