IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

LOYALTY CONVERSION SYSTEMS CORPORATION,	§	
	§	
Plaintiff,	§	
	§	Case No. 2:13-CV-655
v.	§	
	§	
AMERICAN AIRLINES, INC., et al.,	§	
	§	
Defendants.	§	

MEMORANDUM OPINION AND ORDER

Before the Court is the Defendants' Motion for Judgment on the Pleadings (Dkt. No. 61). The Court GRANTS the motion and holds that the asserted claims of the two patents in suit are invalid on the ground that they are directed to unpatentable subject matter.

I. BACKGROUND

Plaintiff Loyalty Conversion Systems Corporation ("Loyalty") owns the two patents at issue in this case, U.S. Patent Nos. 8,313,023 ("the '023 patent") and 8,511,550 ("the '550 patent"). On August 20, 2013, Loyalty filed actions against each of the nine defendants. Those actions were later consolidated under the lead case, No. 2:13-cv-655. Loyalty asserted claims 31-34, 36-42, and 44-46 of the '023 patent, and claims 1-3 and 5-7 of the '550 patent against each of the nine defendants.

After the filing of answers and counterclaims, seven of the nine defendants jointly filed this motion for judgment on the pleadings under Fed. R. Civ. P. 12(c).[1] They sought an order holding the asserted claims of the '023 and '550 patents invalid under 35 U.S.C. § 101.

The '023 patent, entitled "Exchange of Non-Negotiable Credits of an Entity's Rewards Program for Entity Independent Funds," is directed to a system by which non-negotiable credits earned in an awards program (such as airline frequent flyer miles or hotel loyalty award points) can be converted into credits that can be used to purchase goods or services from a vendor other than the issuing entity. The '550 patent, entitled "Graphical User Interface for the Conversion of Loyalty Points Via a Loyalty Point Website," is directed to a graphical user interface, such as a website, that includes a conversion option that, as in the '023 patent, allows the conversion of non-negotiable credits earned from one entity into a form that can be used to purchase goods and services from another vendor.

The common specification of the two patents explains that loyalty rewards issued to customers are typically redeemable with the granting entity or its affiliates, but not with other unaffiliated entities. That limitation reduces the attractiveness of the rewards to customers and leads to some customers having modest amounts of rewards from multiple providers, none of which have significant value to the customer. In addition, the specification cites delays in processing requests for redemption of awards and the expiration of awards as discouraging

[1] The seven defendants that have joined in this motion are American Airlines, Inc.; Delta Air Lines, Inc.; Frontier Airlines, Inc.; Southwest Airlines Co.; Spirit Airlines, Inc.; United Airlines, Inc.; and U.S. Airways, Inc. Two of the defendants, JetBlue Airways Corporation and Hawaiian Airlines, Inc., have not joined in this motion. JetBlue has filed a motion to dismiss based on improper venue, and Hawaiian has filed a motion to dismiss for lack of personal jurisdiction. The Court has ruled on both of those motions today.

consumers from participating in awards programs. '023 patent, col. 1, line 18, through col. 2, line 11; '550 patent, col. 1, line 37, through col. 2, line 32.

Other aspects of the invention described in the common specification are (1) a software method for converting non-negotiable credits into negotiable funds, in which the conversion of non-negotiable credits into negotiable funds at an agreed-upon conversation rate is automatically determined and the conversion transaction automatically performed; and (2) a "Web-based credit to fund conversion system," in which the negotiable funds obtained through conversion of non-negotiable credits can be used for e-commerce purchases from vendors that do not honor the non-negotiable credits. '023 patent, col. 2, line 66 through col. 3, line 24; '550 patent, col. 3, ll. 21-46.

1. The '023 Patent Claims

The asserted claims of the '023 patent include independent claims 31 and 39, and dependent claims 32-38, 40-42, and 44-46. Claim 31 recites a method enabling a customer to convert loyalty award credits of one vendor into loyalty award credits of a second vendor so that the customer can use those converted credits to make purchases from the second vendor. Claim 39 recites a "computer program product" that performs the same function.

Independent claim 31 of the '023 patent provides as follows:

> **31**. A method comprising:
>
> a commerce partner agreeing to accept transfers or conversions of quantities of non-negotiable credits to entity independent funds in accordance with a credits-to-funds ratio, wherein the non-negotiable credits have been earned as part of a rewards program of an entity, wherein the commerce partner accepts the entity independent funds for goods or services that the commerce partner provides, wherein in [the] absence of the non-negotiable credits being converted or transferred into the entity independent funds the commerce partner does not accept the non-negotiable credits for the goods or services that the commerce

partner provides, wherein the entity-independent funds are loyalty points of a loyalty program of the commerce partner;

at least one of one or more computers detecting a communication over a network to grant a consumer a quantity of the entity independent funds, wherein the quantity of entity independent funds results from a conversion or transfer of at least a subset of the non-negotiable credits into the quantity of entity independent funds in accordance with the credit-to-funds ratio, wherein the subset of the non-negotiable credits are expended as part of the conversion or transfer, and wherein the commerce partner is compensated for providing the entity independent funds to the consumer;

responsive to the communication, at least one of one or more computers granting the consumer the quantity of the entity independent funds; and

the at least one of the one or more computers accepting at least a portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides, wherein the one or more computers do not accept the non-negotiable credits of the entity's rewards program for the goods or services in absence of the conversion or transfer.

Independent claim 39 of the '023 patent provides as follows:

39. A computer program product comprising:

one or more non-transitory computer-readable mediums;

program instructions, stored on at least one of the one or more non-transitory computer-readable mediums, to detect a communication over a network to grant a consumer a quantity of entity independent funds, wherein the quantity of entity independent funds results from a conversion or transfer of at least a subset of non-negotiable credits into the quantity of entity independent funds in accordance with a credit-to-funds ratio, wherein the subset of the non-negotiable credits are expended as part of the conversion or transfer, and wherein the commerce partner is compensated for providing the entity independent funds to the consumer, wherein the commerce partner agrees to accept transfers or conversions of quantities of the non-negotiable credits to entity independent funds in accordance with the credits-to-funds ratio, wherein the non-negotiable credits have been earned as part of a rewards program of the entity, wherein the commerce partner accepts the entity independent funds for goods or services that the commerce partner provides, wherein in [the] absence of the non-negotiable credits being converted or transferred into the entity independent funds the commerce partner does not accept the non-negotiable credits for the goods or services that the commerce partner provides, wherein the entity-independent funds are loyalty points of a loyalty program of the commerce partner;

one or more non-transitory computer-readable mediums;

program instructions, stored on at least one of the one or more non-transitory computer-readable mediums, to, responsive to the communication, grant the consumer the quantity of the entity independent funds; and

> program instructions, stored on at least one of the one or more non-transitory computer-readable mediums, to accept at least a portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides, wherein, per the program instructions, the non-negotiable credits are not accepted for the goods or services in absence of the conversion or transfer.

The claims that depend from each of the independent claims add minor functions such as calculating and transferring the converted loyalty points and completing the sale of goods and services by the second vendor.

2. The ’550 Patent Claims

The only asserted independent claim in the ’550 patent is claim 1. Also asserted are dependent claims 2-3 and 5-7. Claim 1 recites a method in which a computer provides one or more Web pages that can be used by clients to convert non-negotiable loyalty award points of one vendor into loyalty award points of a second vendor so that the customer can use those converted points to make purchases from the second vendor. The claim also recites an agreement between the first vendor and the second vendor that permits consumers to convert the non-negotiable loyalty award points of the first vendor into loyalty award points of the second vendor in accordance with a fixed conversion rate. When that occurs, the first vendor compensates the second vendor in an agreed-upon amount for allowing the conversion, based on the quantity of points converted. The computer that responds to a message indicating the selection of the conversion option processes the selection, and the computer serving the Web pages updates the graphical user interface with the changes in the user’s loyalty award point accounts.

Independent claim 1 of the ’550 patent provides as follows:

1. A method comprising:

a computer serving a set of one or more Web pages for a loyalty program of an entity to one or more remotely located client machines, wherein the Web pages are able to be rendered within a client-side browser as a graphical user interface on the one or more client machines, wherein upon being rendered within the client-side browser said graphical user interface shows a quantity of non-negotiable credits, wherein said non-negotiable credits are loyalty points of the loyalty program possessed by a member, wherein upon being rendered within the client-side browser the graphical user interface comprises a conversion option to convert at least a subset of the shown non-negotiable credits into a quantity [of] entity independent funds, wherein said entity independent funds are different loyalty points of a different loyalty program of a commerce partner, wherein said entity independent funds are possessed by the member, wherein an agreement exists between the entity and the commerce partner, wherein the agreement permits members to convert the non-negotiable credits to the entity independent funds in accordance with a fixed credits-to-funds conversion ratio, wherein the agreement specifies that the entity is to compensate the commerce partner in an agreed upon amount of cash or credit for conversions of non-negotiable credits to entity independent funds, wherein said agreed upon amount is a multiple of a quantity of converted non-negotiable credits, wherein the entity independent funds are redeemable per the different loyalty program for commerce partner goods or for commerce partner services, wherein the commerce partner is not said entity, wherein in [the] absence of being converted the non-negotiable credits are not accepted as payment for commerce partner goods or for commerce partner services;

the computer responsive to receiving a message indicating a selection of the conversion option, processing the selection to effectuate changes in the served set of Web pages; and

responsive to the processing, the computer serving one or more Web pages or Web page updates that include the effectuated changes to the one or more remotely located client machines, wherein upon being rendered within the client-side browser the graphical user interface is updated with the effectuated changes, wherein the updated graphical user interface shows a reduced quantity of non-negotiable credits possessed by the member in the loyalty program, said reduced quantity resulting at least in part from the subset of non-negotiable credits being converted into the quantity of entity independent funds in accordance with the fixed credits-to-funds conversion ratio.

The claims that depend from claim 1 add minor functions such as effectuating and displaying the changes in the quantity of converted and available loyalty points.

II. DISCUSSION

A. The Standard for Granting Judgment on the Pleadings Under Rule 12(c)

Rule 12(c) of the Federal Rules of Civil Procedure provides that "[a]fter the pleadings are closed—but early enough not to delay trial—a party may move for judgment on the pleadings." A motion under Rule 12(c) "is designed to dispose of cases where the material facts are not in dispute and a judgment on the merits can be rendered by looking to the substance of the pleadings and any judicially noticed facts." Great Plains Trust Co. v. Morgan Stanley Dean Witter & Co., 313 F.3d 305, 312 (5th Cir. 2002), quoting Hebert Abstract Co. v. Touchstone Props., Ltd., 914 F.2d 74, 76 (5th Cir. 1990); see 5C Charles Alan Wright and Arthur R. Miller, Federal Practice & Procedure § 1367, at 206-07 (3d ed. 2004). A court in ruling on a motion for judgment on the pleadings may consider not only the pleadings themselves, but also any exhibits to the pleadings or matters incorporated by reference in the pleadings, as long as all the material allegations of fact are undisputed and only questions of law remain to be decided by the court. Id. at 207-08. The ultimate question for the court in deciding a Rule 12(c) motion is whether, viewed in the light most favorable to the plaintiff, the complaint states a valid claim for relief. Hughes v. Tobacco Inst., Inc., 278 F.3d 417, 420 (5th Cir. 2001); St. Paul Mercury Ins. Co. v. Williamson, 224 F.3d 425, 440 n.8 (5th Cir. 2000).

The issue of invalidity under section 101 presents a question of law. Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1340-41 (Fed. Cir. 2013); Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333 (Fed. Cir. 2012); In re Bilski, 545 F.3d 943, 951 (Fed. Cir. 2008) (en banc), aff'd, 130 S. Ct. 3218 (2010). However, that legal conclusion "may contain underlying factual issues." Accenture, 728 F.3d at 1341. In this case, the parties have

not pointed to any factual issues that could affect the Court's analysis of the section 101 issue. The Court therefore regards that issue as appropriate for disposition under Rule 12(c).

Although the Federal Circuit has observed that "claim construction is not an inviolable prerequisite to a validity determination under § 101," the court has nonetheless suggested that "it will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter." Bancorp Servs., L.L.C. v. Sun Life Assurance Co., 687 F.3d 1266, 1273-74 (Fed. Cir. 2012). Accordingly, the Court has waited until after the claim construction hearing in this case to rule on the present motion in order to ensure that there are no issues of claim construction that would affect the Court's legal analysis of the patentability issue. The Court is now satisfied that there are no disputed issues of claim construction that would affect the proper analysis of the patentability of the asserted claims, and no other issues of fact that are material to the section 101 question. The Court therefore turns to the merits of the patentability issue.

B. Patentable Subject Matter Under 35 U.S.C. § 101

Notwithstanding the prolixity of the claims, they recite a very simple invention: a computer-driven method and computer program for converting one vendor's loyalty award credits into loyalty award credits of another vendor. In principle, the invention is thus the equivalent of a currency exchange as applied to loyalty award credits such as airline frequent flyer miles or hotel loyalty award points. The Court concludes that the invention claimed in the '023 and '550 patents is not fundamentally different from the kinds of commonplace financial transactions that were the subjects of the Supreme Court's recent decisions in Bilski v. Kappos,

130 S. Ct. 3218 (2010), and Alice Corporation Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014), in which the Court held patent claims invalid for failing to recite patentable subject matter. This case falls squarely within the principles announced in those cases. Accordingly, the Court holds that the asserted claims of the '023 and '550 patents are invalid.

1. The Bilski Decision

In Bilski, the Supreme Court addressed the patentability of an invention claiming a method for buyers and sellers of commodities to protect, or hedge, against the risk of price fluctuations. As the Court explained, claim 1 of the application at issue in Bilski described a series of steps instructing how to hedge risk, and claim 4 put the concept articulated in claim 1 into a simple mathematical formula. Claim 1 in Bilski provided as follows:

> (a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumers;
>
> (b) identifying market participants for said commodity having a counter-risk position to said consumers; and
>
> (c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.

130 S. Ct. at 3223-24.

The Supreme Court characterized the claims in Bilski as efforts to patent "both the concept of hedging risk and the application of that concept to energy markets." 130 S. Ct. at 3229. Applying principles drawn from several of its prior decisions, the Court concluded that the claims at issue in Bilski were unpatentable "because they are attempts to patent abstract ideas." Id. at 3229-30. The prohibition against patenting abstract ideas, the Court explained, "'cannot be circumvented by attempting to limit the use of the formula to a particular

technological environment' or adding 'insignificant postsolution activity.'" Id. at 3230, quoting Diamond v. Diehr, 450 U.S. 175, 191-92 (1981).

The claims in Bilski were unpatentable, the Court held, because they "explain the basic concept of hedging, or protecting against risk," and the concept of hedging "is an unpatentable abstract idea." Bilski, 130 S. Ct. at 3231. To allow the applicants to patent risk hedging "would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea." Id. With respect to whether claims to the practice of hedging would be patentable if limited to hedging as applied to commodities in the energy market, the Court held that claims to an abstract idea cannot avoid invalidation on the ground that they are limited to the application of that abstract idea to a single field of use. Id.

2. The CLS Bank Decision

Four years after Bilski, the Supreme Court addressed a similar issue in the CLS Bank case. The claims at issue in that case were drawn to a computerized system for mitigating "settlement risk," i.e., the risk that only one party to an agreed-upon financial exchange will satisfy its obligation. As the Court explained, the claims were "designed to facilitate the exchange of financial obligations between two parties by using a computer system as a third-party intermediary." 134 S. Ct. at 2352. The claims involved "a method of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk. The intermediary creates and updates 'shadow' records to reflect the value of each party's actual accounts held at 'exchange institutions,' thereby permitting only those transactions for which the parties have sufficient resources. At the end of each day, the intermediary issues irrevocable instructions to the exchange institutions to carry out the permitted transactions." Id. at 2356.

The Supreme Court held that the claims at issue were drawn to the abstract idea of intermediated settlement and that "merely requiring generic computer implementation fails to transform that abstract idea into a patent-eligible invention." 134 S. Ct. at 2352. On their face, the Court explained, the claims address the concept of intermediated settlement, i.e., "the use of a third party to mitigate settlement risk." Id. at 2356. The Court concluded that the concept of intermediated settlement, like the concept of risk hedging in Bilski, is a fundamental economic practice that qualifies as an "abstract idea" beyond the scope of 35 U.S.C. § 101. 134 S. Ct. at 2356. Both concepts, the Court held, "are squarely within the realm of 'abstract ideas' as we have used that term." Id. at 2357.

On one important issue, the Supreme Court in CLS Bank went beyond Bilski. The claims in Bilski did not require the use of computers, while the claims in CLS Bank did. Significantly, the Court held that the introduction of a computer into the claims did not render the claims in CLS Bank patentable. Relying on its prior decision in Gottschalk v. Benson, 409 U.S. 63, 64 (1972), the Court stated that "simply implementing a mathematical principle on a physical machine, namely a computer, '[i]s not a patentable application of that principle.'" 134 S. Ct. at 2357 (alteration in original). That is, "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." Id. at 2358. The relevant question, the Court explained, "is whether the claims here do more than simply instruct the practitioner to implement the abstract idea of intermediated settlement on a generic computer." Id. at 2359. The Court concluded that they did not, because the function performed by the computer at each step of the claims was "purely conventional," id., quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1298 (2012), and that it merely

required "a generic computer to perform generic computer functions," id. As the Court explained, the method claims, did not "purport to improve the functioning of the computer itself. Nor [did] they effect an improvement in any other technology or technical field. Instead, the claims at issue amount to 'nothing significantly more' than an instruction to apply the abstract idea of intermediated settlement using some unspecified, generic computer." Id. at 2359-60 (citations omitted). The Court held that was "not '*enough*' to transform an abstract idea into a patent-eligible invention." Id. at 2360, quoting Mayo, 132 S. Ct. at 1297.

3. Appling Bilski and CLS Bank to This Case

If the applicants in Bilski can be said to have claimed the unpatentable concept of hedging, as applied to commodities in the energy market, and the patentees in CLS Bank can be said to have claimed the unpatentable concept of intermediated settlement as applied to financial transactions, the patentees in this case can fairly be said to have claimed the unpatentable concept of currency exchange, as applied to the exchange of currencies in the form of loyalty award credits of different vendors.[2]

a. Loyalty does not claim that the patentees invented the concept of converting the loyalty award credits of one vendor into loyalty award credits of another in order to facilitate

[2] Loyalty argues that the conversion of loyalty award credits does not constitute a form of "currency conversion," because it does not involve money. The term "currency," however, is not limited to money, but includes other credits that are exchangeable for things of value. See Webster's Third New International Dictionary 557 (Philip Babcock Gove ed. 2002) (defining "currency" as "something that is in circulation as a medium of exchange"). The exchange of one vendor's loyalty award points for another's is not different in principle from any exchange of monetary currencies that are not readily negotiable outside of their country of origin. An exchange of Belarusian rubles for Polish złotys at the Polish-Belarus border would be an example of such a currency exchange, as would an exchange of Sheraton hotel award points for miles in an American Airlines frequent flyer account.

customer purchases from the second vendor. Instead, Loyalty argues that the patentees invented a computerized method and system for doing that task efficiently. But close examination of the asserted claims shows that they are largely functional in nature and do little more than set forth the general concept of currency exchange, as applied to loyalty awards, and then announce the use of "one or more" computers to obtain various efficiencies in the process of converting one type of loyalty award credits into another.

In claim 31 of the '023 patent, for example, the computers are identified as "detecting a communication over a network to grant a consumer a quantity of the entity independent funds, wherein the quantity of entity independent funds results from a conversion or transfer of at least a subset of the non-negotiable credits into the quantity of entity independent funds in accordance with the credit-to-funds ratio." '023 patent, col. 10, ll. 7-13. Translated into plain English, that limitation simply requires the computers to keep track of the conversion of loyalty award credits from one vendor to another. It is a purely functional limitation; neither the limitation nor anything in the specification provides any detail as to how that function is performed. In any event, recording a transaction is a mundane operation that can be performed by any generic computer with conventional programming.

The same is true of the two subsequent limitations, which require the computers to "grant[] the consumer the quantity of entity independent funds" and to "accept[] at least a portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides." '023 patent, col. 10, ll. 19-24. Translated, those limitations merely require that the computers credit the consumer, after the conversion of the first vendor's loyalty award credits, with the loyalty award credits of the second vendor, and then facilitate the

consumer's purchase of a product or service from the second vendor. Again, there is no detail about how those functions are performed. In any event, there is no suggestion that those functions are performed in any novel or unusual manner; instead, from their description those functions appear to be routine functions that can readily be performed by a generic computer with conventional programming.[3]

The dependent claims add nothing of substance that would affect the patentability of the claims under section 101. Claim 32 requires the computers to add converted loyalty points to the consumer's existing account with the second vendor. Claim 33 requires the computers to complete the sale of goods or services by the second vendor. Claim 34 requires the computers to convert the loyalty points of the first vendor into a number of loyalty points of the second vendor in accordance with a fixed conversion ratio. Claim 36 requires that a single computer perform a number of the claimed functions. Claim 37 requires that a plurality of computers perform those same functions. And claim 38 requires that the computer or computers be owned by or operated for the second vendor. Again, those claims are mainly functional in nature, and nothing in the claims or the specification reveals how any of the functions are performed or suggests why any of those functions are not within the routine capacity of a generic computer with conventional programming.

[3] In another order entered today, the Court has held that claim 31 is invalid for indefiniteness based on the portion of the claim that recites "the at least one of the one or more computers accepting at least a portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides." The Court's indefiniteness ruling does not affect the section 101 analysis, which does not turn on the problem with the antecedent basis in the quoted language from that claim. Claim 31 is therefore invalid both for indefiniteness and for unpatentability under section 101.

Claims 39 of the ’023 patent and its dependent claims (40-42 and 44-46) are similar in content to claim 31 and its dependent claims, except that claim 39 is directed to a “computer program product” and contains limitations to “one or more non-transitory computer-readable mediums” and “program instructions[] stored on at least one of the one or more non-transitory computer-readable mediums.” ’023 patent, col. 11, ll. 1-4, 29-31, 34-35. Although drafted in remarkably cumbersome form, the claim in essence recites a computer program that detects communications relating to the conversion of loyalty award points, in which a customer converts loyalty award points of one vendor into loyalty award points of another vendor pursuant to an agreement between the vendors to allow the conversion of otherwise non-negotiable credits. The claimed computer effects the conversion by granting the consumer award points of the second vendor in exchange for the award points of the first vendor and then accepts the award points associated with the second vendor in exchange for a purchase made by the consumer from that vendor. See id., col. 11, ll. 1-41. Thus, although claim 39 adds limitations reciting a computer and “non-transitory computer-readable mediums,” the claim adds nothing of substance to the basic currency-conversion concept other than to provide that the steps of the currency conversion are performed by computers.

The claims that depend from claim 39 likewise add nothing material to the section 101 analysis. Claim 40 requires that the program instructions enable access to the loyalty program account maintained for the consumer by the second vendor and record the addition of the converted loyalty award points to that account. Claim 41 requires that the program instructions complete the sale of goods or services of the second vendor with converted loyalty award points. Claim 42 requires that the program instructions effectuate the transfer of loyalty award points in

accordance with the agreed-upon conversion rate. Claim 44 requires that a single computer perform the steps recited in claim 39. Claim 45 requires that a plurality of computers communicating with each other perform those functions. And claim 46 requires that the computers that perform those functions be owned by or operated for the second vendor.

The same is true of claims 1-3 and 5-7 of the '550 patent. Those claims are similar to those in the '023 patent except that they include limitations requiring the use of a graphical user interface, such as a Web page, enabling the consumer to track and direct the conversion of the loyalty award points. The dependent claims of the '550 patent (claims 2-3 and 5-7), like the dependent claims of the '023 patent, add little to the limitations of independent claim 1. The dependent claims, in essence, simply require: (1) that the graphical user interface show the number of converted loyalty points (claim 2); (2) that the graphical user interface show the quantity of converted loyalty points possessed by the consumer (claim 3); (3) that the first vendor set a lower threshold greater than 100 on the number of loyalty points to be converted (claim 5); (4) that the loyalty programs can be airline, hotel, or credit card loyalty programs (claim 6); and (5) that the computer serves one or more Web pages with updates that include changes in loyalty awards accounts within a single user-interactive Web session (claim 7). Like the asserted claims of the '023 patent, the asserted claims of the '550 patent are functional in nature and do not include anything that departs from the basic concept of currency conversion other than the use of computers to facilitate the conversion process and record the transactions incidental to that process.

In light of Bilski and CLS Bank, the resolution of the section 101 issue in this case is straightforward. At their core, the asserted claims of the two patents in suit are directed to the

conversion of loyalty award points of one vendor into loyalty award points of another. That core idea plainly would not be patentable without more, as it is indistinguishable in principle from the simple and familiar financial or business operations that were at issue in Bilski and CLS Bank, as well as similar financial operations at issue in various Federal Circuit decisions in which the claims were held to be invalid under section 101. See Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336 (Fed. Cir. 2013) ("system for generating tasks to be performed in an insurance organization"); Bancorp Servs., L.L.C. v. Sun Life Assurance Co., 687 F.3d 1266 (Fed. Cir. 2012) (method for managing a life insurance policy, including generating the policy, calculating fees, and determining the surrender value and investment value of the policy); Dealertrack, Inc. v. Huber, 674 F.3d 1315 (Fed. Cir. 2012) (method for processing credit applications); Fort Props., Inc. v. Am. Master Lease LLC, 671 F.3d 1317 (Fed. Cir. 2012) (method for creating a real estate investment instrument adapted for performing tax-deferred exchanges); CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366 (Fed. Cir. 2011) (method for verifying the validity of credit card transactions). If anything, the conversion process at the core of the claims in this case is simpler and more commonplace than some of the methods held unpatentable in the cases cited above.

b. Loyalty attempts to distinguish those precedents on several grounds, but none of the distinctions is persuasive. First, Loyalty argues that the use of a computer to perform the claimed functions is sufficient to avoid a ruling of unpatentability. However, the Supreme Court's decision in CLS Bank answers that argument. The Court in CLS Bank addressed the argument that "the introduction of a computer into the claims" rendered patentable an invention that otherwise would not have been. 134 S. Ct. at 2357. Citing Gottschalk v. Benson, 409 U.S.

at 67, the CLS Bank Court rejected that argument on the ground that computer implementation of an abstract idea "did not supply the necessary inventive concept; the process could be 'carried out in existing computers long in use.'" 134 S. Ct. at 2357. Accordingly, the Court explained, "simply implementing a mathematical principle on a physical machine, namely a computer, [i]s not a patentable application of that principle.'" Id., quoting Mayo, 132 S. Ct. at 1301. The Court derived the same proposition from its earlier decision in Parker v. Flook, 437 U.S. 584, 585-86 (1978). In that case, the Court in CLS Bank explained, the formula that was set forth in the claims was itself an abstract idea, and "the computer implementation was purely conventional." 134 S. Ct. at 2358, citing Flook, 437 U.S. at 594.

Those cases, according to the CLS Bank Court, "demonstrate that the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." 134 S. Ct. at 2358. "Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of 'additional featur[e]' that provides any 'practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.'" Id. (alterations in original) (citation omitted), quoting Mayo, 132 S. Ct. at 1297. The Court then analyzed the role played by the computer in the invention at issue in CLS Bank, and concluded that the claims did no more "than simply instruct the practitioner to implement the abstract idea of intermediated settlement on a generic computer." Id. at 2359. In particular, the Court explained that the function performed by the computer at each step was "purely conventional." As the Court explained:

> Using a computer to create and maintain "shadow" accounts amounts to electronic recordkeeping—one of the most basic functions of a computer. The same is true with respect to the use of a computer to obtain data, adjust account balances, and issue automated instructions; all of these computer functions are

> "well-understood, routine, conventional activit[ies]" previously known to the industry. In short, each step does no more than require a generic computer to perform generic computer functions.
>
> Considered "as an ordered combination," the computer components of petitioner's method "ad[d] nothing . . . that is not already present when the steps are considered separately." Viewed as a whole, petitioner's method claims simply recite the concept of intermediated settlement as performed by a generic computer. The method claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. Instead, the claims at issue amount to "nothing significantly more" than an instruction to apply the abstract idea of intermediated settlement using some unspecified, generic computer. Under our precedents, that is not "enough" to transform an abstract idea into a patent-eligible invention.

132 S. Ct. at 2359-60 (alterations in original) (citations omitted).

That analysis applies directly to the claims in this case. The role of the computer in the claims of the '023 and '550 patents is limited to the basic functions of a generic computer, including storing and displaying information, performing simple arithmetic calculations, and enabling a customer to make e-commerce purchases from a vendor.[4] Nothing in the claims purports to improve the functioning of the computer itself, and the computer components of the claims add nothing that is not already present in the steps of the claimed methods, other than the speed and convenience of basic computer functions such as calculation, communication, and the display of information. See Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333 (Fed. Cir. 2012), quoting SiRF Tech., Inc. v. Int'l Trade Comm'n, 601 F.3d 1319, 1333 (Fed. Cir. 2010) ("In order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, rather than function solely as

[4] The patents acknowledge that "[a]ny kind of computer system or other apparatus adapted for carrying out the methods described herein is suited." '023 patent, col. 5, ll. 64-66; '550 patent, col. 6, ll. 18-20.

an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations.").

In order to "salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making the calculations or computations could not." Bancorp Servs., L.L.C. v. Sun Life Assurance Co., 687 F.3d 1266, 1278 (Fed. Cir. 2012). Because the computers recited in the asserted claims in this case do not "play a significant part in permitting the claimed method to be performed," Fort Props., Inc. v. Am. Master Lease LLC, 671 F.3d 1317, 1323 (Fed. Cir. 2012), quoting Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (internal quotation marks omitted), the recitation of a generic computer in the claims of the '023 and '550 patents does not render those claims patentable.

Loyalty argues that the computer referenced in its claims is not a "generic computer," but instead is a "special purpose computer able to grant loyalty points to members of the loyalty program of the commerce partner and able to redeem customer possessed loyalty points for goods or services that the commerce partner provides." Dkt. No. 71, at 10. That is an accurate description of the functions the claimed computer performs. The problem for Loyalty, however, is that all of those functions consist of simple forms of data recording, storage, and calculation, all of which are conventional functions that can be performed by a generic computer without any novel programming or improvement in the operation of the computer itself.[5] The addition of

[5] In support of its argument on that point, Loyalty cites the Federal Circuit's decision in Ultramercial, Inc. v. Hulu LLC, 722 F.3d 1335, 1339 (Fed. Cir. 2013). That decision, however, was vacated by the Supreme Court following the CLS Bank decision. Wild Tangent, Inc. v. Ultramercial, LLC, 134 S. Ct. 2870 (2014). The Federal Circuit's decision in Ultramercial therefore no longer has any precedential effect.

computer implementation to the method claims therefore does not render those claims patentable.

As confirmation of the simplicity of the functions that the claims assign to computers, it is clear that each of the functions recited in the asserted claims of the ’023 and ’550 patents could be performed by a human being without the aid of a computer of any kind. It is certainly true that computers assist with managing a large volume of transactions, doing so at great speed, and communicating the results of those transactions to the parties. However, the basic functions of converting non-negotiable loyalty award credits of one vendor into loyalty award credits of a second vendor according to an agreed-upon conversion rate, and then allowing the consumer to use the converted loyalty award credits to make purchases from the second vendor, are all functions that are readily within the capacity of a human to perform without computer aid. Indeed, the patents themselves confirm that fact, conceding that “the methods detailed herein can also be methods performed at least in part by a service agent and/or a machine manipulated by a service agent.” ’023 patent, col. 3, ll. 42-44; ’550 patent, col. 3, ll. 64-67. The fact that an invention consists of simple calculations that can readily be performed by humans is a factor that has frequently been held to be indicative of unpatentability. See, e.g., Gottschalk v. Benson, 409 U.S. 63, 67 (1972) (mental processes are not patentable); Cybersource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1372 (Fed. Cir. 2011) (method steps unpatentable because they “can be performed in the human mind or by a human using a pen and paper”); SiRF Tech., Inc. v. Int’l Trade Comm’n, 601 F.3d 1319, 1333 (Fed. Cir. 2010). Adding a computer to perform those mental steps “does not transform a patent-ineligible claim into a patent-eligible one.” Accenture Global Servs. GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1345 (Fed. Cir. 2013).

c. Loyalty next contends that the claims in this case are not general in nature, but address a highly specific subject—conversion of loyalty reward points. Accordingly, it argues, the claims do not pose the risk of preempting a large number of potential applications in the future. Again, the Supreme Court's recent decisions require rejection of that argument.

In Diamond v. Diehr, 450 U.S. 175 (1981), the Supreme Court explained that the prohibition against patenting abstract ideas, in the form of mathematical formulas, "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." Id. at 191. The Court expanded upon that principle in Bilski, where it wrote that "limiting an abstract idea to one field of use . . . [does] not make the concept patentable." 130 S. Ct. at 3231. And in Mayo, the Court addressed the same argument, where the patentee argued that "because the particular laws of nature that its patent claims embody are narrow and specific, the patents should be upheld." Mayo, 132 S. Ct. at 1303. The Court rejected that argument, holding that the unpatentability of natural laws, natural phenomena, and abstract ideas applies even if the natural law, phenomenon, or abstract idea at issue is narrow. Id. at 1301 ("[O]ur cases have not distinguished among different laws of nature according to whether or not the principles they embody are sufficiently narrow. . . . [T]he cases have endorsed a bright-line prohibition against patenting laws of nature, mathematical formulas and the like . . . .").

The Court made the same point in CLS Bank. Citing its prior decision in Flook, the Court explained that in that case it had "rejected the argument that implementing a principle in some specific fashion will automatically fall within the patentable subject matter of § 101." 134 S. Ct. at 2358 (citations omitted). Flook, the Court explained, "stands for the proposition that the

prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." Id.

In this case, although the field of use is narrow—the conversion of one entity's loyalty award points into those of another entity—the preemptive effect of Loyalty's claims within that field of use is broad. Because the claims are largely functional in nature, they do not provide any significant description of the particular means by which the various recited functions are performed. All that is disclosed is the ultimate objective—in this case an operational computerized system for converting loyalty awards of one entity into those of another. There is no disclosure of the precise method by which the computer performs those functions. Accordingly, the claims would read on virtually any computerized method of performing that function, even if the method used were quite different from any conventional computer-based means. See Mayo, 132 S. Ct. at 1302 (claims are "set forth in highly general language covering all processes that make use of the [known] correlations" and therefore "threaten to inhibit the development of more refined treatment recommendations"). In that sense, these patents, like other similar business method patents, have the potential to foreclose future innovation disproportionately "relative to the contribution of the inventor." Id. at 1303.

d. Loyalty next contends that the claims of the '023 and '550 patents are not directed to abstract ideas because they involve economic activities having tax consequences and "[a]n economic action resulting in a tax consequence (a taxable economic transaction) is not abstract, but is instead concrete." Dkt. No. 71, at 16. Loyalty adds that generally accepted accounting principles ("GAAP") require such concrete economic transactions "to be accounted for" and that GAAP "includes no provisions for accounting for abstract ideas." Id. at 16-17. Loyalty then

notes that "[n]o known decisions under the judicially created exception for abstract ideas encompass subject matter that if followed necessarily results in a tax consequence or that necessarily results in a GAAP recognized financial accounting event." Id. at 17.

While that may be true, that is no basis for distinguishing the authorities discussed above. An example of an abstract idea would be the idea of granting retail salesmen a commission amounting to a percentage of their sales. No doubt a company's payment of the commissions would be taxable events and would have to be accounted for on the company's books. But the idea would still be a familiar business concept, like hedging or negotiated settlement, and would not be patentable subject matter, whether implemented by a computer or not. Nor would the idea be patentable whether it applied to all salesmen or was limited in its "field of use" to, for example, only those in the business of selling running shoes. The fact that the abstract idea of paying sales commissions happens to apply to activity with tax consequences has nothing to do with its patentability. Likewise, the fact that the exchange of loyalty award points described in the '023 and '550 patents has tax consequences has nothing to do with whether those patents claim patentable subject matter.

e. Finally, Loyalty argues that the "computer medium" claims—claims 39-42 and 44-46 of the '023 patent—are patentable for the additional reason that such claims "have been explicitly identified as patentable" in earlier cases. As noted above, those claims recite "[a] computer program product comprising: one or more non-transitory computer-readable mediums" including "program instructions, stored on at least one of the one or more non-transitory computer-readable mediums." '023 patent, col. 11, ll. 1-4, 29-31, 34-35, 45-46; col. 12, ll. 1-2, 11-12, 20-21.

Yet again, the Supreme Court has answered that argument. The patents at issue in CLS Bank contained not only method claims, but system claims and claims to "a computer-readable medium." The Supreme Court noted that the petitioner had conceded that the "computer-readable medium" claims rose or fell with the method claims. The Court then disposed of the system claims summarily, stating that "the system claims are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea." CLS Bank, 134 S. Ct. at 2360.

The Court's rationale for that ruling clearly applies here. The Court explained that it had long warned against interpreting section 101 "in ways that make patent eligibility depend simply on the draftsman's art." 134 S. Ct. at 2360, quoting Mayo, 132 S. Ct. at 1294, and Flook, 437 U.S. at 593 (internal quotation marks omitted). "Holding that the systems claims are patent eligible," the Court added, "would have exactly that result." 134 S. Ct. at 2360. The "computer-readable medium" claims in the '023 patent fall squarely within that reasoning. Although they purport to be claims to a physical object, like the system claims in CLS Bank, in reality they simply claim the use of a computer in connection with the conversion process and therefore are equally as vulnerable under section 101 analysis as the method claims.[6]

f. Although this case can be—and is being—decided based on a comparison of the claims at issue in this case with the claims at issue in Bilski, CLS Bank, and similar Federal Circuit cases, there is a broader point to be made about the particular type of "business method"

[6] The recitation of the use of the web pages and the Internet, found in the claims of the '550 patent, is also insufficient to avoid a holding of unpatentability. See CyberSource, 654 F.3d at 1370 (use of the Internet to verify credit-card transactions does not add enough to the abstract idea of verification of transactions to avoid the bar of section 101).

patents of which the patents in this case are examples. Patents of this sort have the following features in common: (1) they recite methods for performing a commonplace business function—such as currency conversion, hedging, or employing intermediated settlement in a financial transaction—typically by using a computer system or computer components to perform those methods; (2) they are aspirational in nature in that they describe the business function, but do not describe any novel manner of performing that function other than referring to the use of routine operations performed by a specially programed computer; and (3) the recitations referring to the use of a computer do not include any inventive measure that "purport[s] to improve the functioning of the computer itself," CLS Bank, 134 S. Ct. at 2359. With respect to the role of the computer, such patents "do[] no more than require a generic computer to perform generic computer functions." Id.; see SmartGene, Inc. v. Advanced Biological Labs., SA, 555 F. App'x 950, 955 (Fed. Cir. 2014) ("The claim does not purport to identify new computer hardware: it assumes the availability of physical components for input, memory, look-up, comparison, and output."); Planet Bingo, LLC v. VKGS LLC, No. 2013-1663 (Fed. Cir. Aug. 26, 2014) (holding computerized system for managing a bingo game unpatentable because the nature of the function performed by the computer at each step is "purely conventional").

In short, such patents, although frequently dressed up in the argot of invention, simply describe a problem, announce purely functional steps that purport to solve the problem, and recite standard computer operations to perform some of those steps. The principal flaw in these patents is that they do not contain an "inventive concept" that solves practical problems and ensures that the patent is directed to something "significantly more than" the ineligible abstract idea itself. See CLS Bank, 134 S. Ct. at 2355, 2357; Mayo, 132 S. Ct. at 1294. As such, they

represent little more than functional descriptions of objectives, rather than inventive solutions. In addition, because they describe the claimed methods in functional terms, they preempt any subsequent specific solutions to the problem at issue. See CLS Bank, 134 S. Ct. at 2354; Mayo, 132 S. Ct. at 1301-02. It is for those reasons that the Supreme Court has characterized such patents as claiming "abstract ideas" and has held that they are not directed to patentable subject matter.

The patents in this case fit that paradigm perfectly. The exchange of one vendor's non-negotiable award credits for credits that are negotiable with another vendor is an established form of the familiar business practice of converting a non-negotiable currency into a negotiable one. As noted, Loyalty does not claim that the named inventors on the patents in this case invented the practice of converting loyalty award points. Loyalty merely claims that by using a computer it can enhance such exchanges by providing transaction speed and information availability, which are routine advantages afforded by computers in a wide variety of applications. Nothing in the patents describes or claims an advance in computer technology that makes the performance of those functions more effective. In substance, Loyalty's patents simply announce that it would be advantageous to have a readily available market for rapid loyalty award credit exchanges, and then recite the routine steps of displaying account information and enabling award credit conversions through the use of computers and websites. The patents thus effectively claim any conventional loyalty award conversion system that uses computers and interactive websites to perform the conversions. A careful assessment of Loyalty's patents shows that there is very little more to them than that, just as there was very little more to the patents at issue in Bilski and CLS Bank than conducting hedging in a particular market or

intermediated settlement by computer. The claims are thus directed to an "abstract idea" as that term is used in Bilski and CLS Bank.

While the concurring justices in Bilski and CLS Bank would have invalidated all "business method" patents, the majority in both cases stopped short of taking that step. See Bilski, 130 S. Ct. at 3229 ("[T]he Patent Act leaves open the possibility that there are at least some processes that can be fairly described as business methods that are within patentable subject matter under § 101."). There are sound reasons for the majority's unwillingness to sweep an entire category of patents aside: First, some patents that can be regarded as "business method" patents employ highly complex and inventive algorithms or have technological aspects to them, such as improvements in computer technology that make particular business functions more effective. Those patents are not invalid simply because the algorithms or technologies are directed to a business purpose. Second, and relatedly, it is not always easy to determine whether a particular patent is a "business method" patent at all. Any simplification of the law of unpatentable subject matter that would result from invalidating all business method patents would be largely offset by the considerable additional effort that would be required to define the line between "business method" patents and other, legitimate patents that happen to have application to the conduct of business.[7] With that said, even though the Supreme Court majority

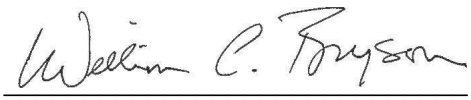
[7] For example, it is unclear whether patents on methods for encrypting business transactions over the Internet should be considered "business methods" patents. Such patents can involve complex algorithms that are designed to defeat even sophisticated efforts at decryption by hackers and other unauthorized persons. In the oral argument of the CLS Bank case, both by counsel for the accused infringer and the Solicitor General pointed to patents on methods of encryption as examples of technology that are directed to methods of doing business but would not be invalid as unpatentable subject matter. See Alice Corp. Pty. Ltd. v. CLS Bank Int'l, No. 13-298, Official Transcript of Argument before U.S. Supreme Court 34, 50 (Mar. 31, 2014). Such a patent has been challenged as involving unpatentable subject matter, but that

in Bilski and CLS Bank elected to proceed cautiously and not to hold all "business method" patents invalid, the Court clearly signaled that the subset of such patents having the characteristics described above are invalid under section 101. That is the broader lesson that this Court takes away from the Supreme Court's decisions in Bilski and CLS Bank as well as the Federal Circuit decisions cited above.

Because the Supreme Court's decisions in Bilski and CLS Bank, together with similar decisions from the Federal Circuit, set forth principles that compel the Court to hold the asserted claims of the '023 and '550 patents invalid under 35 U.S.C. § 101, the Court GRANTS the defendants' motion for judgment on the pleadings.

IT IS SO ORDERED.

SIGNED this 2d day of September, 2014.



WILLIAM C. BRYSON
UNITED STATES CIRCUIT JUDGE

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challenge was rejected by this Court. See TQP Development, Inc. v. Intuit Inc., 2014 WL 651935 (E.D. Tex. Feb. 19, 2014).