

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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FIDELITY NATIONAL INFORMATION SERVICES, INC.,  
Petitioner,

v.

CHECKFREE CORPORATION,  
Patent Owner.

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Case CBM2013-00031  
Patent 7,996,311 B2

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Before BRIAN J. McNAMARA, BARRY L. GROSSMAN, and  
LYNNE E. PETTIGREW, *Administrative Patent Judges*.

McNAMARA, *Administrative Patent Judge*.

FINAL WRITTEN DECISION  
*37 C.F.R. § 42.73*

## BACKGROUND

On December 23, 2013, we entered a Decision to Institute a covered business method patent review, Paper 16 (“Decision to Institute”), of U.S. Patent No. 7,996,311 B2 (“the ’311 Patent”) on the grounds that claims 1– 20 do not recite patent-eligible subject matter under 35 U.S.C. § 101.

In this Final Written Decision, we hold that claims 1–20 are unpatentable.

### THE ’311 PATENT (EXHIBIT 1001)

The ’311 Patent relates to electronic commerce and an electronic bill payment system with merchant identification. Ex. 1001, col. 1, ll. 39-41. A first station, the payer station, initiates payment by transmitting payment information to a second station, the payment processing device or remittance payment processor (RPP), which processes the payment. *Id.* at col. 3, ll. 3-10; col. 5, ll. 6-10. If required, the second station, which may be a programmed general computer having a processor and storage device, uses alteration rules and validation to transform payer account number information into an altered payer account number that can be used for processing the transaction. *Id.* at col. 3, ll. 15-55. The RPP stores, as validation templates in a database, separate business rules for each merchant that identify the expected general format for any consumer account associated with that merchant. *Id.* at col. 8, ll. 18-23. The received account number is checked against the validation template to validate that the account number conforms to the general account number format to which the account assigned with the applicable merchant must conform. *Id.* at col. 8, ll. 23-28. Once the account number has been validated, it is modified to conform to alteration rules for the applicable merchant. *Id.* at col. 8, ll. 45-47. The alteration rules, which are stored in a database, relate to the format of the consumer’s account number that the applicable merchant system

requires to process consumer payment. *Id.* at col. 8, ll. 47-50. The alterations typically specify an altered account number that includes a portion of the payer's identifying information. *Id.* at col. 8, ll. 51-55. The RPP then transmits the altered account number to a merchant via a network along with the payment. *Id.* at col. 8, ll. 63-67.

### ILLUSTRATIVE CLAIM

Claim 1 is illustrative:

A method, comprising;  
executing computer-implemented instructions on one or more payment processor computers associated with a payment processor for:  
receiving, by the payment processor, a consumer account number associated with a payor and a payee, wherein the consumer account number is not in a format expected by the payee;  
retrieving from a merchant database, by the payment processor, an alteration rule associated with the payee, wherein the alteration rule is associated with an account number format that is expected by the payee;  
altering, by the payment processor, the received consumer account number to a modified consumer account number based upon the alteration rule, wherein altering the consumer account number includes inserting a character string at a particular position in the consumer account number to create the modified consumer account number; and  
transmitting, by the payment processor, the modified consumer account number to the payee.

### THE '311 PATENT IS NOT A PATENT FOR A TECHNOLOGICAL INVENTION

A covered business method patent is “a patent that claims a method or corresponding apparatus for performing data processing” or other operations used in the practice, administration, or management of a financial product or service.

37 C.F.R. § 42.301(a). A covered business method patent “does not include patents for technological inventions.” *Id.* A technological invention is determined by considering whether the claimed subject matter as a whole recites a technical feature that is novel and unobvious over the prior art, and solves a technical problem using a technical solution. 37 C.F.R. § 42.301(b).

Patent Owner argues that, in the mid-to-late 1990s, Patent Owner recognized that its systems could not ensure that a received consumer account number would be provided to a merchant in the specific format necessary to be processed automatically by a merchant accounting system, without human intervention. Paper 20 (“PO Resp.”) 68. Thus, according to Patent Owner, providing processing to transform the consumer account number into the format required for electronic posting at the merchant was a significant technological improvement. *Id.* at 69. Patent Owner argues that providing a system to generate automatic payment advice in a format that each merchant’s system could process automatically was a technological advance in the field of electronic bill payment (EBP) systems and represents a technological solution to the problem of ensuring from within an EBP system that merchants could quickly and accurately access a consumer's account. *Id.* at 70.

The method recited in claim 1, although executed on a payment processor computer, is not limited to any particular system and does not recite any improvements in the processor itself. The steps of the method executed by the computer include receiving a consumer account number in an unexpected format, retrieving an alteration rule associated with the account number format that is expected by the payee, altering the account number to the expected format, and transmitting the modified consumer account number to the payee. The recitation of computer-implemented instructions and a database in the payment processor to

modify the consumer account number does not change the nature of the claimed process. Establishing compatible account numbers is not a technical problem. As acknowledged by inventor David Garrison, the method recited in claim 1 adjusts the account number using conventional equipment. Ex. 1013; 124:15-25. Thus, because the subject matter in claim 1, as a whole, does not recite a technical feature that is novel and unobvious over the prior art, and does not solve a technical problem using a technical solution, the invention recited in claim one is not a technological invention.

### CLAIM CONSTRUCTION

Patent Owner argues that in construing the “payment processor” as *a processor that carries out programmed instructions* and the “payment processor computer” as a *general-purpose computer having the capability to implement programmed instructions*, our Decision to Institute failed to recognize that the entirety of the specification of the ’311 Patent is dedicated to describing the operation of the payment processor as a specially programmed computer functioning only within a larger EBP system. PO Resp. 64–65. Patent Owner also contends that the term “merchant database” cannot be construed correctly outside the context of an EBP system. *Id.* at 65-66. Patent Owner further contends that the recited “alteration rule” should be construed as a data structure that enables a specially programmed payment processor computer to modify appropriately the received consumer account number pursuant to the express terms of the claims. *Id.* at 66.

The Patent Owner Response extensively addresses these claim construction issues in its discussion of patent-eligible subject matter under 35 U.S.C. § 101. We address these claim construction issues in that context as well.

§ 101 SUBJECT MATTER ELIGIBILITY

In *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347 (2014), the Supreme Court applied a two-step test for determining whether a claim recites patent-eligible subject matter. First, we determine whether the claims at issue are directed to one or more patent-ineligible concepts, i.e., laws of nature, natural phenomenon and abstract ideas. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296-97 (2012)). If so, we then consider whether the elements of each claim, both individually and as an ordered combination, transform the nature of the claim into a patent-eligible application to ensure that the patent in practice amounts to significantly more than a patent upon the patent-ineligible concept itself. *Id.*

Thus, the first step in our analysis is to consider whether the claims of the '524 Patent are drawn to an abstract concept. A challenged claim, properly construed, must incorporate enough meaningful limitations to ensure that what is claimed is more than just an abstract idea and is not a mere “drafting effort designed to monopolize [an abstract idea] itself.” *Mayo* 132 S. Ct. at 1297. In *Alice*, the Supreme Court considered claims that, on their face, were drawn to the fundamental economic concept of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk. The Court concluded that, like the hedging in *Bilski*, the claims were drawn to an ‘abstract idea’ beyond the scope of § 101. *Alice Corp.*, 134 S. Ct. at 2355-7.<sup>1</sup>

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<sup>1</sup> In *Bilski v. Kappos*, 561 U.S. 593 (2010) the Supreme Court found unpatentable, as abstract ideas, claims drawn to hedging against the financial risk of commodity price fluctuations where the claims recited the steps of initiating a series of financial transactions between commodity providers and consumers, identifying market participants with a counter-risk for the same commodity and initiating a series of risk balancing transactions between those market participants and the commodity provider.

Claims 1 and 15 of the '311 Patent are drawn to executing instructions on a computer. In response to receiving an account number in a format not expected by a payee, the instructions act to retrieve from a database a rule that causes the received account number to be altered into the expected format before transmitting the account number to the payee. Thus, claims 1 and 15 are directed to the abstract concept of comparing a received account number to a payee's format, applying a rule, and modifying the account number in accordance with that rule to the expected format before transmitting it to the payee.

As evidence that the computer is not a meaningful limitation and that the claims are drawn to an abstract concept, Petitioner cites testimony of inventor David Garrison demonstrating that the steps of the claimed invention could be performed manually. Pet. 12–16. (citing Ex. 1008, 175:25–180:14, 185:11–189:25; Ex. 1009; Ex. 1010. Patent Owner's argument that the claimed automatically performed method precludes the need for human intervention, PO Resp. 68, essentially concedes that the process could be performed manually. We conclude that the recitation of a computer in the method or system claims is not a meaningful limitation and does not change the abstract nature of the claimed subject matter. The limitations recited in claims 2–14, which depend from claim 1, and claims 16–20, which depend from claim 15, relate to the abstract concept recited in claims 1 and 15 and are not meaningful limitations that provide patent-eligible subject matter. *See, e.g.*, claims 2 and 16, which recite receiving the consumer account number in association with the payment request. Thus, the method and system claims of the '311 Patent are drawn to the abstract concept of establishing compatibility between account numbers by applying appropriate rules to modify an account number.

The second step in the analysis requires us to determine whether the claims do significantly more than simply describe the abstract method. *Ultramercial, Inc. v. Hulu, LLC*, 772 F. 3d 709, 715 (Fed. Cir. 2014) (citing *Mayo* 132 S. Ct. at 1297). We note that “[A]fter *Alice* there can be no doubt recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.” *DDR Holdings, LLC v. Hotels.com*, No. 2013-1505, 2014 WL 6845152, at \*9 (Fed. Cir. Dec. 5, 2014). As evidence that the claims of the ’311 Patent recite only generic computer limitations that do not infuse the claimed abstract concept with patent-eligible subject matter, Petitioner cites the testimony of inventor David Garrison acknowledging that the inventors of the ’311 Patent did not invent any particular hardware or machine and that the recitation of one or more payment processor computers does not require the use of any specific payment processor computer. Pet. 20–21 (citing Ex. 1013; 124:15-25).

Nevertheless, Patent Owner contends that the claims recite patent-eligible subject matter because they involve a specially programmed computer that is integral to the claimed process and system. PO Resp. 2. Patent Owner contends that the problems solved by the ’311 invention are linked inextricably to the electronic bill payment process in which the payment processor operates. PO Resp. 15, 17. According to Patent Owner, every software step in the process claims and every component in the system claims, in combination with the defined software instructions, are absolutely essential to the process and the systems as a whole. *Id.*

Petitioner responds that Patent Owner’s experts improperly read details from the specification into the claims. Paper 29 (“Pet. Reply”) 4–5. As examples, Petitioner cites the testimony of Patent Owner’s expert, Dr. John Kelly, as importing a volume requirement into the claims, and conflicting testimony



provided by Dr. Kelly and Patent Owner's other expert, Mr. Elliott McEntee about whether all payments are bill payments. *Id.* (citing Ex. 2025, 251:18–258:12; Ex. 2024, 37:9–38:14, 41:7–42:11, Ex. 2028, 430:10–10, 431:13–15).

Patent Owner argues that because safeguards built into earlier systems were becoming overwhelmed by the volume of transactions and the diversity of payers and payees in EBP systems, the inventors of the '311 Patent developed the payment processor computer system described and claimed in the '311 Patent. PO Resp. 18. However, to determine patent-eligibility we look to the claims of the patent rather than the motivation of the inventors.

Patent Owner argues that the '311 Patent explains that the payment processor is a specially programmed computer system that, with the merchant database and alteration rules, operates only within an EBP system. *Id.* at 19, 21, 30–36. Although the specification states that the invention relates to an electronic bill payment system with merchant identification, Ex. 1001, col. 1, ll. 39–41, the claims are not limited to an EBP system, and the payment processor computer is not recited in that context. As Petitioner notes, Patent Owner's position is inconsistent with the specification at column 9, lines 5-11, which states that the invention can be utilized in any number of environments and implementations. Pet. Reply 6. Thus, the specification contradicts the statement of Patent Owner's expert, Dr. Kelly, that the account number verification and altering procedure carried out by software in the payment processor computer of the '311 Patent would not be executed outside the context of an EBP system. PO Resp. 45 (citing Ex. 2015 ¶ 68 and Ex. 2016 ¶ 154). Petitioner also notes that Patent Owner's position is inconsistent with the testimony of Patent Owner's expert Mr. Elliott McEntee, who testified that the claims of the '311 Patent are not limited to an EBP system. Pet. Reply 6 (citing Ex. 2018, 298:14–301:3; Ex. 2024 159:17). Even if

the payment processor computer were claimed in the context of an EBP system, this limitation on the field of use would not necessarily render the claims patent-eligible. *Bancorp Servs., L.L.C. v. Sun Life Assurance Co.*, 687 F.3d 1266, 1280 (Fed. Cir. 2012) (citing *Bilski*, 561 U.S. at 612 (“[*Parker v. Flook*, 437 U.S. 584 (1978)] established that limiting an abstract idea to one field of use or adding token post-solution components did not make the concept patentable.”)).

Patent Owner further argues that the ’311 Patent explains that, without human involvement, the payment processor is programmed specially to perform functions within the EBP, such as processing electronic payment data to change the consumer account number data, initiating electronic transmission of the modified data, and other functions that route payment transactions to particular payment remittance centers of merchants. PO Resp. 21–22, 36–41. According to Patent Owner, claims 1 and 15 recite functionally connected software steps performed by the payment processor computer, in which each step is integral to the ultimate result, i.e. the electronic transmission of a modified account number data structure to the merchant. *Id.* at 42. Patent Owner argues that in retrieving the alteration rule the payment processor computer must access a specific data structure. *Id.* at 43. However, no such limitation appears in the claims. In addition, as Petitioner notes, Patent Owner’s expert, Dr. Kelly, testified that the account numbers recited in the claims and data structures are different concepts. Pet. Reply 7, (citing Ex. 2024, 205:12–207:20). Petitioner also points out the rebuttal testimony of its expert, Dr. Michael Shamos, stating that account numbers are not limited to any particular data structure. Pet. Reply 7 (citing Ex. 1021 ¶¶ 64, 69, 71).<sup>2</sup>

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<sup>2</sup> Although we dismiss Patent Owner’s motion to exclude certain other paragraphs of the Shamos Declaration because we do not rely upon that testimony, Patent Owner did not move to exclude these paragraphs of the Shamos Declaration.

Citing the testimony of its expert, Dr. Kelly, Ex. 2015 ¶ 42, Patent Owner also argues that “the various components that constitute the EBP system within which the payment processor operates communicate with each other and other computer-based entities electronically using one or more communications networks.” PO Resp. 20. Claim 15 recites one or more payment processor computers in communication with a merchant database. None of the claims recites networking details that provide patent-eligible subject matter. To the extent that receiving a consumer account number and transmitting a modified account number to the payee involves communication over networks, such features are nothing more than computers being used conventionally for ordinary and routine purposes. Such an implementation is, at best, pre-solution and post-solution activity and does not transform the abstract idea recited in the claims into patent-eligible subject matter. *Bancorp Servs.*, 687 F.3d at 1280.

We reach a similar conclusion concerning Patent Owner’s arguments about the claimed merchant database. Patent Owner argues that the merchant database contains data records, including the alteration rules and validation templates used to perform the validation steps in dependent claims 8–10, which the payment processor uses to perform the actions recited in claims 1 and 15. PO Resp. 24–26, 33–34. Patent Owner’s expert, Dr. Kelly, testifies that the merchant database would have no use outside an EBP system and is a structure that is uniquely relevant to such a system. PO Resp. 34 (citing Ex. 2015 ¶ 96). Dr. Kelly’s testimony, however, goes not to the structure of the merchant database, but to its content. That content, which includes the rules to be applied in altering account numbers to achieve compatibility, is material only to carrying out the abstract idea recited in the claims and does not make an otherwise ineligible claim patent-eligible subject matter.

We also agree with Petitioner that, by transforming a consumer account number into a modified account number, the claims of the '311 Patent do not cause a physical transformation of a data structure, as argued by Patent Owner. PO Resp. 48–49. As previously discussed, the claims of the '311 Patent do not recite data structures that are physically transformed. In addition, Petitioner points out that Patent Owner's expert, Mr. McEntee, testified that the claims of the '311 Patent do not require any physical transformation. Pet. Reply 11 (citing Ex. 2028, 472:19–428:2). We further note that satisfying the machine-or-transformation test, by itself, is not sufficient to render a claim patent-eligible, as not all transformations or machine implementations infuse an otherwise ineligible claim with an inventive concept. *DDR Holdings, LLC*, 2014 WL 6845152, at \*9. We conclude that altering an account number to be compatible with the requirements of a payee's system, as recited in the claims of the '311 Patent, is not the type of transformation that rises to the level of patent-eligible subject matter.

Patent Owner contends that in our Decision to InSTITUTE we did not evaluate the claims as a whole to determine whether they contain additional substantive limitations that narrow, confine, or otherwise tie down the claims so that, in practical terms, they do not cover the full abstract idea itself. PO Resp. 61. According to Patent Owner, the claims include several concrete and tangible limitations that limit the use of the “putative abstract idea” to a specific application within an electronic bill payment system. *Id.* As discussed above, relying on intrinsic and extrinsic evidence, Patent Owner attempts to read into the claims structures that they do not recite. Independent claims 1 and 15 recite only executing instructions to receive an account number, applying a rule to alter the account number to an expected form, and transmitting the altered account number. The specification notes that the claimed steps can be implemented using a general

purpose computer, or other processing device capable of executing programmed instructions. Ex. 1001, col. 3. ll. 58–65. Thus, the limitations recited in claims concerning the payment processor and the payment processor computer are generic computer limitations. Generic computer limitations do not make an otherwise ineligible claim patent-eligible. *DDR Holdings*, 2014 WL 6845152, at \*9.

Patent Owner contends that one of ordinary skill in the art would recognize that there are other ways to perform the consumer account number modification process associated with a payee in an EBP system that are not covered by the claims of the '311 Patent. PO Resp. 63. According to Patent Owner, a consumer account number could be modified without the use of payee-specific alteration rules, for example, by unconditionally removing all dashes in an account number or prepending a certain number of zeroes at the beginning of the account number. *Id.* However, as Petitioner points out, Patent Owner's argument is based on the incorrect premise that the alteration rule recited in the claims of the '311 Patent must be a payee-specific rule that cannot be applied universally. Pet. Reply 12.

Claims 1 and 15 recite comparing the received account number to the format expected by a payee, retrieving an alteration rule associated with the payee, and modifying the account number to conform to that format expected by the payee. Claims 1 and 15 recite that the alteration rule is associated with the payee, but do not recite that the alteration rule is payee specific. Claims 1 and 15 recite only that the received account number is not in the format expected by a payee. Any modification to the received account number must apply a rule that conforms the account number to the expected format. Retrieving and applying a universal rule that performs the same procedures on each received account number would still be within the scope of independent claims 1 and 15.

Except to the extent of automating the process to handle large numbers of received account numbers, there is no need for a computer to perform any function necessary to modify the account number that cannot be performed by hand, i.e., the computer does not play a significant role in permitting the claimed method to be carried out. *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012). Thus, notwithstanding their computer-aided limitations, claim 1 and apparatus claim 15 effectively preempt the abstract concept of comparing a received account number to a payee's format, applying a rule, and modifying the account number in accordance with that rule to the expected format before transmitting it to the payee. *See Bilski*, 561 U.S. at 611-13.

In dependent claims 2 and 16, the consumer account information is received in association with a payment request. Claims 3 and 4, which depend from claim 2, recite transmitting the account number to the payee in fulfillment of a payer's payment request or plurality of requests. Claims 2-4 and 16 do not further limit the structure in carrying out the claimed abstract idea.

Dependent claims 5-7 recite features relating to retrieving the alteration rule by identifying stored payee information, searching the merchant database to identify the stored payee information, and generating a zip code from the stored payee information and searching based on the zip code. Although a computer-implemented approach may be useful to carrying out such steps, these claims are not limited to any particular machine implementation and can be carried out by hand.

Claims 8 and 17, which depend from claims 1 and 15, respectively, recite retrieving from the merchant database a validation template identifying a payee's general account number format and verifying the received account number against

the retrieved template. The validation template is a form of rule, which need not be implemented by a machine.

Claim 9 depends from claim 8 and recites that the verification includes verifying that the received account number includes a specific character string, is of a specific length, and yields a particular check digit after being run through a specific, but undefined, algorithm. Claim 10 depends from claim 8 and recites that the verification is performed prior to altering the account number. While a computer-implemented approach may be useful to carrying out steps in claims 8, 9, 10, and 17, these claims are not limited to any particular machine implementation and can be carried out by hand.

Claims 11 and 18, which depend from claims 1 and 15, respectively, recite inserting at a particular position in the received account number a fixed character string specified by the payee. These claims do not recite any limitation to which the specific computer has particular significance.

Claims 12 and 19, which depend from claims 1 and 15, respectively, recite that the inserted character string includes at least a portion of information concerning the payer. These claims do not recite any limitation to which the specific computer has particular significance.

Claims 13 and 20, which depend from claims 1 and 15, respectively, recite retrieving from the merchant database the identification of a remittance center to which the payer's modified account number is transmitted. Nothing about retrieving the identity of the remittance center changes the abstract nature of the claims. These claims do not recite any limitation to which the specific computer has particular significance.

Claim 14, which depends from claim 13, recites retrieving the identification of the remittance center based on the received consumer account number or the

modified account number. These claims do not recite any limitation to which the specific computer has particular significance.

Patent Owner argues that dependent claims 2–14 and 16–20 are patent-eligible based on the presence of a specially programmed payment processor computer acting in an EBP system with additional data structures (claims 2, 6 – 8, 11–13, 17–20 ) and processing steps (claims 3 –7, 9–10). PO Resp. 49–58. As discussed above, the claims do not recite any data structures, and the only payment processor computer limitations are generic computer limitations that do not rise to the level of patent-eligible subject matter.

Thus, we conclude that dependent claims 2–14 and 16–20 do not recite patent-eligible subject matter.

#### MOTION TO EXCLUDE

Having timely objected, Patent Owner moves to exclude certain paragraphs of the rebuttal testimony of Petitioner’s expert Michael Shamos, Ex. 1021 (“Shamos Decl.”), as beyond the scope of the testimony of Patent Owner’s experts. Paper 40 (“Mot. to Exclude”). Petitioner identifies subject matter the challenged paragraphs of the Shamos Declaration rebut. Paper 41 (“Opp. to Mot. to Exclude”).

In reaching our decisions in this proceeding, we do not cite or rely on the portions of the testimony in the Shamos Declaration that Patent Owner moves to exclude. Therefore, Patent Owner’s Motion to Exclude is dismissed.

#### SUMMARY

For the reasons discussed above, we conclude that it has been shown, by a preponderance of the evidence, that claims 1–20 of the ’311 Patent do not recite patent-eligible subject matter.



ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–20 are unpatentable;

FURTHER ORDERED that Patent Owner’s Motion to Exclude is dismissed; and

FURTHER ORDERED that, because this is a final written decision, the parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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