No. 2015-1245

IN THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

JOAO BOCK TRANSACTION SYSTEMS, LLC

Plaintiff-Appellant,

v.

JACK HENRY & ASSOCIATES, INC.,

Defendant-Appellee.

Appeal From The United States District Court
For The District of Delaware In Case No. 1:12-cv-01138-SLR,
Honorable Sue L. Robinson

JOAO BOCK TRANSACTION SYSTEMS, LLC'S OPENING APPELLATE BRIEF [CORRECTED]

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March 18, 2015

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CERTIFICATE OF INTEREST

Counsel for Plaintiff-Appellant, Joao Bock Transaction Systems, LLC, certifies the following:

1. The full name of every party or amicus represented by me is:

   Joao Bock Transaction Systems, LLC (Plaintiff-Appellant)

2. The name of the real party in interest represented by me is:

   Joao Bock Transaction Systems, LLC (Plaintiff-Appellant)

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party represented by me is: None.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the district court or agency or are expected to appear in this Court are:

   - Heninger Garrison Davis, LLC: Steven W. Ritcheson, Joseph J. Gleason, Maureen V. Abbey, Timothy C. Davis, Jacqueline K. Burt, Jonathan R. Miller, M. Blair Clinton, Joseph Gabaeff (no longer with firm)
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DATED: March 18, 2015

Respectfully submitted,
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STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rule 47.5, Plaintiff-Appellant provides as follows:

(a) There have been no previous appeals in this case.

(b) Plaintiff-Appellant is aware of the following pending district court cases in which it is asserting U.S. Patent No. 7,096,003 that may be affected by the Court's decision in this case:

- *Joao Bock Transaction Systems, LLC v. Fidelity National Information Services, Inc.*, No. 3:13-cv-00223-TJC-JRK (M.D. Fla.)
- *Joao Bock Transaction Systems, LLC v. Online Resources Corp.*, No. 8:13-cv-00245-JFB-TDT (D. Neb.)
- *Joao Bock Transaction Systems, LLC v. KeyCorp and KeyBank, National Association*, No. 7:14-cv-02883-WWE (S.D. N.Y.)
- *Joao Bock Transaction Systems, LLC v. HSBC USA, Inc. and HSBC USA, National Association*, No. 7:14-cv-02881-WWE (S.D. N.Y.)
- *Joao Bock Transaction Systems, LLC v. Harland Financial Solutions, Inc.*, No. 1:13-cv-04223-WWE (S.D. N.Y.)
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- *Joao Bock Transaction Systems, LLC v. TradeKing Group, Inc.*, No. 1:14-cv-00530 (D. Del.)

STATEMENT OF JURISDICTION

The district court had jurisdiction under 28 U.S.C. §§ 1331 & 1338(a) and entered a final judgment on December 18, 2014. Plaintiff-Appellant timely filed its notice of appeal on January 7, 2015. 28 U.S.C. § 2107(a); Fed. R. App. P. 4. This Court has jurisdiction under 28 U.S.C. § 1295(a)(1).

STATEMENT OF THE ISSUES

- Did the district court err in ruling on summary judgment that no genuine issues of material fact were in dispute and that Appellee had shown by clear and convincing evidence that the asserted machine claims were directed to an unspecified abstract idea?
- Did the district court err in ruling on summary judgment that no genuine issues of material fact were in dispute and that Appellee had shown by clear and convincing evidence that the asserted machine claims did not include an inventive concept, and instead monopolized an abstract idea?
- Did the district court err in granting Appellee summary judgment of noninfringement?

STATEMENT OF FACTS

The Patent-in-Suit, U.S. Patent No. 7,096,003 (hereinafter, the "Patent-in-Suit" or "'003 Patent"; see JA0037-JA0101)[1], is directed to a new configuration of computer components and software to create new apparatuses, which are used in new ways to give account holders more control over their account, and to improve notifications to the account holder of account or transaction activity. The apparatuses of the asserted claims permit secure communications between account holders and banks, and allow account holders to act to reduce account and transaction fraud. To best understand the contribution provided to the public within the '003 Patent and its claims, one must first recall the state of the art of banking industry and financial services generally, at the time of the invention - August 8, 1996.

A. **State Of The Art**

As of the August 8, 1996 priority date of the Patent-in-Suit, there were numerous problems with fraudulent financial transactions and unauthorized uses of financial accounts. As discussed in the specification, "with the convenience of [various types of cards and accounts] … comes many disadvantages and the opportunity for theft and/or fraud." col. 1:66-2:4; JA0060. The specification

[1] Citation in the form "JAxxxx" refers to the page numbers in the Joint Appendix.

describes "hundreds of millions, if not billions, of dollars" lost every year as a result of this fraud. *Id*. at 2:4-9. At the time of the invention, account holders did not receive notice of fraudulent activity fast enough or conveniently enough to stop the fraud.

> A lost or stolen card may be utilized by an unauthorized individual to spend upwards of thousands of dollars before the unauthorized use is detected and/or before the cardholder can ascertain, and/or be notified, either by the card issuer or servicing institution or when the cardholder detects the unauthorized transaction on his or her monthly account statement, that the card is lost or stolen.

Id. at 2:10-16. The specification describes that accounts and funds can be "accessed, invaded, and/or withdrawn from the account involved without the account owner being notified and/or having a say in the matter." *Id*. at 3:4-7; JA0061. "The account owner is typically notified of the above-described activity involving his or her account days later when he or she either receives a mailed notice and/or when they receive and review their monthly or periodic statement," which the specification notes is usually too late. *Id*. at 3:8-16. The specification continues, describing the limitations of existing systems:

> Current practices do not entail and/or do not include the provision for obtaining an authorization, and/or for providing notice to the cardholder before, during and/or shortly after a transaction, which cardholder authorization and/or notification procedure would be helpful and prove to be essential in preventing the fraudulent use and/or unauthorized use of a card and/or the account number corresponding thereto in a unauthorized transaction and/or shortly thereafter an unauthorized transaction has occurred, thereby minimizing the

> fraudulent and/or unauthorized use of the card and/or the account number corresponding thereto.

Id. at 2:45-55, JA0060; see also *id*. at 3:8-16 and 3:23-29, JA0061. Put simply, the specification notes that "there is no present apparatus or method by which to provide notification to an account owner at the time of the unauthorized transaction and/or account activity and/or shortly thereafter same." *Id*. at 3:29-34; JA0061.

Also in 1996, the financial industry employed a very limited number of remote banking solutions which used only rudimentary security techniques. Cheng Decl. ¶¶ 23-30, JA0692-JA0694. See also Tuohey Depo. 78:1-7, JA0643. This type of security was considered at the time to be good enough. See D.I. 159, p. 18, JA0574 (citing Cheng Decl. ¶¶ 26-30, JA0692-JA0694; Tuohey Depo, 78:1-7, JA0643; Nicholas Depo, Mar 6, 2014, 32:3-34:22, JA0625-JA0626). Despite the advent of the Internet, the banking industry was reticent to embrace Internet and web-based technologies in part due to the security risks involved. (Cheng Decl. at ¶ 23-30, JA0692-JA0694; see also Morgan Stanley "Internet Report"[2], JA0644-

[2] In this report, Bob Metcalfe, inventor of the Ethernet and founder of 3Com, identified several risks that might "crush the internet," specifically: "*Digital Money* — Transaction costs will be too high; … *Monopolies* — Telcos will be slow to reduce costs for highspeed Internet access, and the Internet will become constipated as more users try to send more stuff over the same infrastructure; *Security* — Major security breaches will occur that undermine user confidence; …*Capacity* — The Internet will become chronically overloaded, and the current flat-rate usage business models of vendors will not provide enough investment

JA0656, Some participants in the financial industry had tried and failed to launch secure remote banking systems using the Internet. See U.S. Pat. No. 5,220,501 ("Lawlor"), 2:45-66, JA0950. Due to the prior failures of remote banking, Lawlor suggested that the financial industry needed to look for alternatives to the Internet for remote banking communications. (*Id*. at 1:52-55; 2:45-66).

In addition to security concerns, there were other problems. For example, in August 1996 it was "relatively expensive and impractical to send "mail" electronically." (*Id*. at 1:63-65). "[M]ost intended electronic mail recipients do not even have computers, the necessary communications equipment and the knowledge and experience." (*Id*. at 2:1-4). The cost of technology and training people how to use the technology were also prohibitive. (*Id*. at 2:23-34). Lawlor also noted:

> [U]sers tend to continue to use software they already know and resist learning new packages unless they are convinced the effort will be worthwhile. … Many users would probably prefer to continue their banking transactions in "the old way" rather than spending even only a few hours learning a completely new home banking software package. (*Id*. at 2:10-22).

Internet-based remote banking was simply not a practical reality in 1996, and was not being used to reduce the widespread problem of financial account and transaction fraud.

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dollars to appropriately expand capacity; …" *Internet Report*, at pp.1-2 to 1-3; JA0655-JA0656.

B. The Inventions Set Forth In The Asserted Claims Of U.S. Patent No. 7,096,003

Against this backdrop, the inventors of the '003 Patent developed novel apparatuses "for providing financial transaction authorization, notification and/or security … which overcome[] the shortcomings of the prior art." col. 4:2-7; JA0061. The apparatuses "comprise[d] a central processing computer for processing the … transaction requests." *Id*. at 4:23-25. The apparatuses also comprised a "cardholder communication device" which transmits and receives signals from the central processing computer. *Id*. at 4:48-60. The communication device allows the account holder to set a wide range of restrictions or limitations on the account or on particular transactions or transaction types. The specification describes the communication device as:

> programmable so as to limit and/or restrict the amounts and/or types of transactions, and/or the goods and/or services which may be purchased with the card, the stores or service providers which may be authorized to accept the card, limits on the dollar amounts of transactions pertaining to each authorized vendor, seller and/or service provider, daily spending limits, and/or the geographical area or location to which authorized use may be limited, and/or authorized times for card usage (i.e. specific days, dates, time of day, time of month, year, etc.), and/or any other limitation and/or restriction regarding amount of the transaction, the parties involved, the geographical area limitations, and/or the times of allowed usage. In this regard, the cardholder may provide for temporary transaction and/or purchasing amounts.

Id. at 7:48-67; JA0063. Further, "[t]he central processing computer may transmit signals and/or data pertaining to the transaction to the communication device." *Id*.

at 8:56-58. In this manner, the claimed apparatuses "provide[]an indication to the account owner of when and/or where his or her accounts are being accessed in transactions and/or are being otherwise compromised." Id. at 9:5-8; JA0064.

In each of the 12 claims at issue here, the "central processing computer" and the "communication device associated with an individual account holder" communicate with one another via the Internet.[3] Asserted independent claim 30 recites that the "processing device" of the central processing computer receives a "limitation or restriction … for prohibiting a withdrawal from a checking account or for prohibiting a cashing of a check on a checking account." This limitation or restriction is transmitted from a communication device associated with an individual account holder via the Internet, and is received, stored and utilized "automatically" by the central processing computer. Asserted dependent claim 31 adds that the transmitter of the central processing computer transmits a signal to the communication device of the individual account holder which "contains information regarding the banking transaction." Asserted dependent claim 34 recites that the central processing computer transmits an "electronic mail message" to the communication device. Asserted independent claim 102 is similar to claim 30 but applies to any account "capable of being utilized in transactions involving

[3] For ease of reference, the 12 claims asserted against Appellee below and found invalid by the district court are claims **30**, 31, 34, **102**, 106, 122, **317**, 324, 343, **414**, 416 and 422, with independent claims in **bold**. See JA0983-JA0994.

the purchase of goods or services" rather than just the checking accounts of claim 30. Like dependent claim 31, asserted dependent claim 106 adds the limitation that the transmitter of the central processing computer transmits a signal to the communication device of the individual account holder which "contains information regarding the banking transaction." Asserted dependent claim 122 recites a variety of specific categories of "limitation or restriction" which can be programmed on the "communication device" and sent to the central processing computer via the Internet.

Asserted independent claims 317 and 414 do not recite the "restriction or limitation." They instead require an "input device" or "data entry device" for entering transaction information into the apparatus, a "processing device" of the central processing computer to generate a signal corresponding to the transaction, and a "transmitter" of the central processing computer to transmit the signal over the Internet to the communication device associated with the individual account holder. In claims 317 and 414, the communication device provides information to the account holder about the transaction and is limited to a list of specific devices, including a pager, a home computer, an interactive television, a mobile telephone, etc. Claim 317 recites that the signal is transmitted "independently of any processing of the transaction by a central transaction processing computer." Asserted dependent claim 324 adds that "the transaction is an Internet transaction."

Asserted dependent claim 343 adds that the communication device is a wireless device. Asserted independent claim 414 recites that the signal is transmitted "to a network computer in real time." Asserted dependent claim 416 adds that "the communication device is a wireless device." Asserted dependent claim 422 recites that the processing device of the central processing computer "determines whether a hold is placed" on the account and "disallows the withdrawal." Notably, Appellee has not argued, and the district court has not found, that any one of the asserted claims is representative of any other asserted claim.

C. The Asserted Claims Recite Improved Remote Banking Apparatuses With Distinct Advantages Over Existing Systems

The inventions of the Asserted Claims are directed to machines, or apparatuses, that provide an account holder direct communication with the bank, and direct access to her bank account, with direct control over the account. The account holder uses a "communication device associated with" the account holder to communicate with the bank central processing computer via the Internet. In this way, the account holder can provide individualized account or transaction limits that are received, stored and used by the bank central processing computer automatically. These individualized account or transaction limits are used by the account holder to minimize fraudulent account activity and fraudulent transactions. The account holder can also receive notifications regarding transactions processed on her account, and those notifications can be provided far more quickly,

conveniently and securely than with pre-existing notification techniques. The notifications can be sent "independently" of processing of the transaction, can be sent "in real time" and can be sent to an email address. These advanced notifications help the account holder to identify fraudulent account activity more quickly and thereby reduce fraud.

D. Additional Developments in Remote Banking

1. Federal Agency Guidelines Recommended Layered Security in 2005 and 2011.

It was not until 2005 that the financial industry began to question whether single-factor authentication –userIDs and passwords – provided sufficient security for Internet-based transactions or accounts. In 2005, the Federal Financial Institutions Examination Council ("FFIEC") issued guidelines for financial institutions offering Internet-based financial services entitled "*Authentication in an Internet Banking Environment,*" and stated that then-prevalent single-factor authentication provided insufficient security, and further that increased account holder awareness of security risks was important. JA0657-JA0670; see also Cheng Decl. ¶¶ 31,32; JA0694. The Federal Deposit Insurance Corporation ("FDIC") issued Financial Institution Letters to its FDIC-Supervised Banks to inform them of the FFIEC guidelines and to inform the banks that its examiners would be reviewing the banks to determine the institution's progress in complying with the guidance in future examinations. See e.g., FDIC Financial Institution Letter ©

June 29, 2011, JA0671. The FDIC also set deadlines for its institutions to comply with the guidance letters. *Id*. In 2011, the FFIEC went further and recommended that financial institutions provide account holders with "enhanced controls over account activities, such as transaction value thresholds, payment recipients, number of transactions allowed per day, and allowable payment windows (e.g., days and times)." See *FFIEC Supplement to Authentication in an Internet Banking Environment* (2011) ("FFIEC Supplement" or "2011 FFIEC guidance"), JA0672-JA0684. The same 2011 FFIEC guidance recommended "the use of out-of-band verification for transactions," which means that "a transaction that is initiated via one delivery channel (e.g., Internet) must be re-authenticated or verified via an independent delivery channel (e.g., telephone)." See *FFIEC Supplement*, JA0676-JA0678; JA0683; Cheng Decl. ¶¶ 33, JA0694-JA0695. The 2011 FFIEC guidance also recommended identification of the devices being used by account holders in order to authenticate the communications. See JA0676-JA0678. The FDIC again set deadlines for its institutions to comply with the guidance no later than January 1, 2012. JA0671.

The FDIC-supervised banks and industry participants such as Appellee did not recognize the need for additional security until after these guidelines were issued. Appellee began adopting additional security measures for Internet banking in response to FFIEC and FDIC guidance on Internet Banking and due to the

FDIC's deadlines by which the banks were required to comply with the guidelines. Joseph Nicholas Depo., Mar. 6, 2014 at 159:11-160:3 (JA0626); Joseph Nicholas Depo., May 2, 2014 at 32:3-34:22, JA0632-JA0633.

2. Alternatives to the '003 Patented Invention.

The Asserted Claims are directed to a new, novel system for safeguarding Internet-based transactions and accounts. There existed, in 1996 (and still exist today) alternatives to the claimed inventions. Dial-up systems were being used in 1996, such as Jack Henry's early Cash Management system. D.I. 159 at p. 14, JA0570; Cheng Decl. at ¶ 30, JA0694. The system and method described in U.S. Pat. No. 6,182,052 to Mr. John Fulton, one of Appellee's invalidity experts, recited a device that relied upon a direct dial-up connection to a bank computer, or could alternatively use the then-prevalent x.25 communications network.[4] D.I. 159 at pp. 14-15, JA0570-JA0571. Mr. Fulton's system did not survive the prototype stage and was not ultimately marketed or adopted in the industry. D.I. 159 at p. 3, JA0559. The Lawlor patent proposed as its invention adapting the ATM network for remote banking in lieu of the Internet. (Lawlor, 6:25-7:24, JA0952-JA0953.

[4] Notably, the'052 Patent acknowledges that, at the time, stopping payment on a check required the additional step of signing and mailing a physical form before the account holder's stop payment could be implemented. "Upon registration of the stop payment instruction at the financial institution, the user will receive via mail a form from that institution which must be completed and returned to confirm the stop payment order." '052 Patent, 7:64-67.

The Blonder patent relied upon radio waves transmitted over the then-popular pager system as an alternative manner of communicating with account holders. U.S. Pat. No. 5,708,422 (the "'422 Patent"), JA0877-JA0900.

STATEMENT OF THE CASE

Procedural History – On September 14, 2012, Joao Bock Transaction Systems, LLC ("Appellant") filed a complaint against Jack Henry & Associates, Inc. ("Appellee") alleging that certain of Appellee's products infringed the '003 Patent. (D.I.1; JA0005). On December 3, 2012, Appellee answered and counter-claimed for declaratory judgment of invalidity. (D.I.6; JA0005). After the district court denied its motion to dismiss Appellee's counterclaim (D.I.11, JA0005; D.I.30, JA0008), Appellant answered the counterclaim on June 27, 2013 (D.I.33, JA0009). During the course of discovery, Appellant determined that certain accused systems did not infringe the '003 Patent, and removed those systems from its infringement contentions. Compare JA0544-JA0552; JA0981-JA0992. The district court issued its claim construction order on June 30, 2014 and denied Appellee's motion for summary judgment based on collateral estoppel. (D.I.124; JA0102-JA0121).

On July 29, 2014, Appellee served its Supplemental Final Invalidity Contentions. (JA0162-JA0216). Therein, Appellee identified three different "abstract ideas" to which the asserted claims were purportedly directed, specifically the ideas of "issuer transaction confirmation," "obtaining payor

transaction confirmation" and "contacting a payor to confirm a bank transaction" (JA0181). Expert discovery followed, during which Dr. Steven R. Kursh, Appellee's second of two experts on invalidity, identified two more "abstract ideas," specifically "asking a payor to approve a transaction" and "contacting the transaction payor to confirm authorization of a transaction." (JA0305, JA0325). On September 29, 2014, the parties filed respective motions for summary judgment of invalidity (D.I.138; JA0020) and no invalidity (D.I.142, JA0020-JA0021). Competing motions for summary judgment of infringement and noninfringement (D.I.146; 149, JA0021) were filed on October 11, 2014. In its brief in support of its motion for summary judgment of invalidity, Appellee offered another entirely different proposed "abstract idea," namely "comparing a bank transaction (a check) to account rules or limits, and then, advising the account owner of the action or requesting approval." (D.I.139 at 12; JA0268). In the same brief, Appellee argued the asserted claims "merely perform the standard banking procedure of applying a rule or limit as bank transactions are reviewed." *Id*. at 13. In its subsequent opposition to Appellant's motion for summary judgment of no invalidity, Appellee withdrew its 35 U.S.C. § 102 defense and conceded that none of the asserted claims were anticipated by any prior art. (D.I.155 at 4, 14). In Appellee's reply in support of its motion for summary judgment of invalidity, Appellee disclaimed all its previous expressions of the alleged "abstract idea," saying instead that the

asserted claims "claim no more than a general purpose computer (claimed as parts) performing the acts performed by human beings for decades: communications between a bank and a customer to confirm a bank transaction." (D.I.173 at 6). Importantly, Appellee did not argue anywhere, in any of its invalidity briefs, that the asserted claims preempt or monopolize any of its proposed abstract ideas. Instead, Appellee argued – incorrectly – that the asserted claims do not need to preempt the abstract idea in order to be found invalid under *Alice*. (D.I.173 at 10, fn. 12). On October 31, 2014, the district court held oral argument on the parties' motions for summary judgment. There, Appellant challenged Appellee to explain "how there's complete preemption of any particular abstract idea." Hearing Tr., 116:21-25; JA1109. Appellee declined to explain how the asserted claims preempt the public from practicing any alleged "abstract idea," and instead concluded its argument. *Id*. at 117:3-9; JA1110.

The District Court's Opinion – On December 15, 2014, the district court issued a Memorandum Opinion finding that the twelve asserted claims do not recite patent eligible subject matter and were thus invalid under 35 U.S.C. § 101. The district court granted Appellee's motion for summary judgment of invalidity (D.I.138) and denied Appellant's motion for summary judgment of no invalidity (D.I.142) "with regard to patentable subject matter" but did not reach the parties' remaining validity arguments. D.I.238 at 18-19, fn. 9; A-019-A-020. The district court did

not substantively address the parties' motions concerning infringement, but granted Appellee's motion and denied Appellant's motion because "the claims are invalid and, therefore, not infringed." D.I.238 at 19, fn. 10; A-020.

In Step 1 of its § 101 analysis, the district court concluded "the claims at issue are directed to an abstract idea," but did not actually identify what the alleged abstract idea was. At Step 2, the district court found that the individual computer components recited in the claims were "employed for basic functions" and were thus not "specific or special purpose computers." D.I.238 at 15; A-016. Importantly, the district court addressed only the individual components, and did not address whether the apparatuses of the asserted claims as a whole, when considered as an ordered combination, were conventional or generic. Turning to the preemption inquiry, the Court concluded that "[a]llowing the asserted claims to survive would tie up any innovation related to performing banking transactions on computers." D.I.238 at 17; A-018. The district court then serially addressed certain dependent claim limitations. D.I.238 at 17-18; A-018-A-019. Importantly, the district court found that asserted claim 422 "describes a specific use of the processing device, thereby describing **a particular application** of the 'abstract ideas' discussed above." D.I.238 at 18; A-019 (emphasis added).[5] Finally, the

[5] The Supreme Court held in *Alice* that "**[a]pplications** of such concepts to a new and useful end … remain eligible for patent protection. *Alice Corp. Pty. Ltd. v.*

district court concluded that "[n]one of the dependent limitations serve to limit the claims in such a way that the abstract idea is meaningfully limited." D.I.238 at 18; A-019. The Court below entered its Order on December 15, 2014 (D.I.239; A-021-A-022) and subsequently entered Judgment for Appellee (D.I.241; A-023).

SUMMARY OF ARGUMENT

The district court erred in failing to identify the "abstract idea" to which the asserted claims are purportedly directed. The asserted machine claims are not directed to mental processes performed entirely in the human mind, and instead recite different, novel "transaction security apparatus[es]." In every claim, the recited apparatus includes at least a bank "central processing computer" connected via the then-nascent technology of the Internet to cellular telephones, pagers, interactive televisions and other "communication device[s]" which are "associated with an individual account holder." The recited apparatuses enable financial institutions and their customers to use new techniques to provide improved security for banking and other transactions and accounts.

In ruling that the asserted claims are implemented using only generic computers, the district court ignored its own claim constructions and failed to

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CLS Bank Intern., 573 U.S. __, 134 S.Ct. 2347, 2354, 189 L.Ed.2d 296 (2014). If specific uses of the claimed processing device in fact represent "particular applications" of the unidentified abstract idea, then every asserted claim survives Step 2 of the *Mayo/Alice* analysis.

consider the claimed apparatuses as an ordered combination. The district also erred in finding that the asserted claims "tie up any innovation related to performing banking transactions on computers." D.I.238 at 17; A-018. The district court could not have correctly reached this result based on the record below. In fact, the asserted claims do not come close to monopolizing "performing banking transactions on computers," and at most represent specific, narrow, patent-eligible applications of this broad abstract idea.

STANDARDS OF REVIEW

The Federal Circuit reviews a district court's grant of summary judgment under the law of the regional circuit. See *IGT v. Alliance Gaming Corp.*, 702 F.3d 1338, 1343 (Fed. Cir. 2012) (citing *MicroStrategy Inc. v. Bus. Objects, S.A.*, 4229 F.3d 1344, 1349 (Fed. Cir. 2005)). The Third Circuit reviews a grant of summary judgment *de novo*. *Nicini v. Morra,* 212 F.3d 798, 805 (3d Cir. 2000) (en banc). The Federal Circuit "reviews questions concerning patent-eligible subject matter under 35 U.S.C. § 101 without deference." *Ultramercial, Inc. v. Hulu*, LLC, 772 F.3d 709, 713 (Fed. Cir. 2014)(citing *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F .3d 859, 867 (Fed. Cir. 2010); see also *Content Extraction and Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1346 (Fed. Cir. 2014)("We review the district court's determination of patent eligibility under § 101 *de novo*."). While the issue of patentable subject matter presents a question of

law, the legal analysis "may contain underlying factual issues." *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1340–1341 (Fed. Cir. 2013). Summary judgment is only appropriate if the movant "shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). At summary judgment, the court must "draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence." *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

ARGUMENT

When the validity of an issued patent is challenged under 35 U.S.C. § 101, the analysis starts with the presumption that the patent is valid and that the accused infringer's burden of overcoming this presumption of validity must be proven by clear and convincing evidence. 35 U.S.C. § 282(a); *Microsoft Corp. v. i4i Ltd. Partnership*, 564 U. S. __, 131 S.Ct. 2238, 2242-2243, 180 L.Ed.2d 131 (2011); *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 958 (Fed. Cir. 2014); cert. denied, 2015 WL 132989, 83 U.S.L.W. 3270 (U.S. Jan. 12, 2015) (No. 14-465). When evaluating a challenge to a patent's presumed validity, a court must consider the entire statutory scheme which involves determining whether claims are directed to patentable subject matter (35 U.S.C. § 101), are novel (35 U.S.C. § 102), are non-obvious (35 U.S.C. § 103), and are particularly described (35 U.S.C. § 112). *Bilski*

v. Kappos, 561 U.S. 593, 601 (2010); *Microsoft Corp.*, 131 S.Ct. at 2242. It is within this statutory framework that the Supreme Court stated that the "§ 101 patent-eligibility inquiry is only a threshold test." *Bilski*, 593 U.S. at 602 (emphasis added). Other sections of the Patent Act serve a critical role in adjusting the tension, ever present in patent law, between stimulating innovation by protecting inventors and impeding progress by granting patents when not justified by the statutory design." *Bilski*, 561 U.S. at 609. The Federal Circuit has thus described § 101 as a "coarse eligibility filter," leaving it up to other sections of the Patent Act to filter out inventions that lack novelty, are obvious, or are inadequately described. *Research Corp.*, 627 F.3d at 869. The Supreme Court's recent decisions in *Mayo* and *Alice* have clarified the test to be used. *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U. S. __, 132 S.Ct. 1289, 1296-1298, 182 L.Ed.2d 321 (2012); *Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 573 U.S. __, 134 S.Ct. 2347, 2360, 189 L.Ed.2d 296 (2014)

I. THE ASSERTED CLAIMS PASS THE *ALICE* TEST

The Supreme Court confirmed in *Bilski* that Congress, in enacting §101, "'plainly contemplated that the patent laws would be given wide scope'" and that "Congress took this permissive approach to patent eligibility to ensure that 'ingenuity should receive a liberal encouragement.'" *Bilski*, 561 U.S. at 601 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)). In *Diehr*, the

Supreme Court recognized that "Congress intended statutory subject matter to 'include anything under the sun that is made by man.'"

The Supreme Court has carved out three exceptions to the broad § 101 statutory categories of patent eligible subject matter, namely that "laws of nature, physical phenomena, and abstract ideas" may not be patented. *Bilski*, 561 U.S. at 601-602 (quoting *Chakrabarty*, 447 U.S. at 308). The Supreme Court has established a two-step analysis for evaluating whether a patent improperly claims a law of nature, physical phenomenon or abstract idea. *Mayo*, 132 S.Ct. at 1296-1298; *Alice*, 134 S.Ct. at 2355. The *Mayo/Alice* analysis proceeds on a claim-by-claim basis and requires the party bearing the burden of proving invalidity to demonstrate in Step 1 that the claim in question is directed to one of the judicially-created exceptions. *Id.* The Supreme Court has cautioned that these exclusions must be carefully construed, lest they swallow all of patent law:

> At some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas. Thus an invention is not rendered ineligible simply because it involves an abstract concept. **Applications** of such concepts to a new and useful end … remain eligible for patent protection.

Alice, 134 S. Ct. at 2354. If the claim falls into one of the exceptions, then Step 2 of the analysis requires that each element of the claim must be further evaluated both individually and in an ordered combination to determine whether the elements transform the claim to such an extent that it nevertheless claims only subject matter

that is patentable. *Id.* at 2355. A claim contains the requisite "inventive concept" if it comprises more than "well-understood, routine, conventional activity already engaged in by the scientific community." *Mayo*, 132 S.Ct. at 1298. A claim which is directed to an abstract idea may nevertheless remain a patent-eligible application of that abstract idea by, for example, improving upon existing technology or integrating the abstract idea into a new combination of steps in a way that is unconventional in the field. *Id. at* 1298-1300.

A. The Asserted Claims Are Not Directed to an Abstract Idea

The asserted apparatus claims are directed to new and novel machines that represent an improvement over prior art systems, and are not directed to patent-ineligible abstract ideas.

1. Neither Appellee Nor The District Court Were Able To Identify The Alleged "Abstract Idea."

It was Appellee's burden to prove, by clear and convincing evidence, that the asserted claims of the '003 Patent are directed to an abstract idea and thus fail Step 1 of the *Mayo/Alice* test. Appellee did not carry its burden. On the contrary, Appellee abandoned every "abstract idea" it proposed, and ended up saying nothing more than that the asserted claims were directed to a "computer … performing the acts performed by human beings for decades." JA0709. But even if true, this is not enough under *Alice* to support a finding of invalidity. *Alice* also does not hold or suggest that a claimed machine is patent-ineligible simply because

it performs some tasks which could previously be performed by a human. As one court has observed, even the cotton gin would not be patentable under this test. *Ameranth, Inc. v. Genesis Gaming Solutions, Inc.*, Case Nos. SACV 11–00189 AG (RNBx), SACV 13–00720 AG (RNBx), 2014 WL 7012391, *6 (C.D. Cal. Nov. 12, 2014) ("[A]utomation of manual tasks is not necessarily abstract. U.S. Patent No. 72 (1794) to Eli Whitney for a cotton gin is one familiar example of a solidly tangible automating machine."). Thus, a bald proclamation that a patented machine performs tasks previously performed by a human does not render the claimed machine ineligible as abstract. Nor does *Alice* hold or suggest that even computerized inventions are unpatentable if they involve mental steps performed in the human mind, or steps that can be performed by a person using pen and paper. Indeed, for computer inventions, "this mode of analysis" is simply "unhelpful," if not outright misleading:

> Many inventions could be theorized with pencil and paper, but pencil and paper can rarely produce the actual effect of the invention. Likewise, with regard to software, a human could spend months or years writing on paper the 1s and 0s comprising a computer program and applying the same algorithms as the program. At the end of the effort, he would be left with a lot of paper that obviously would not produce the same result as the software. The problems of pencil-and-paper analysis are heightened in the context of software, which necessarily uses algorithms to achieve its goals. Pencil-and-paper analysis can mislead courts into ignoring a key fact: although a computer performs the same math as a human, a human cannot always achieve the same results as a computer.

California. Inst. of Tech. v. Commc'ns, Inc., Case No. 2:13–cv–07245–MRP–JEM 2014 WL 5661290, *16 (C.D. Cal. Nov. 3, 2014).

The district court found that the asserted claims were directed to an abstract idea without actually identifying the purported abstract idea. Nowhere does the lower court decision expressly identify the "abstract idea" to which the asserted claims are purportedly directed. It is difficult to overstate the magnitude of the district court's error in failing to identify an abstract idea while nevertheless invalidating the asserted claims. Given the difficulty both Appellee and the district court have had in identifying the purported abstract idea of the asserted claims, a proper analysis under Step 1 would have concluded that the asserted claims are not actually directed to any abstract ideas. This would have ended the § 101 inquiry. The district court's failure to identify an abstract idea has deprived Appellant of the opportunity on appeal to respond to the particular abstract idea for which its claims were invalidated. The district court's failure to identify an abstract idea also prevents this Court from properly reviewing the district court's decision. Nor is the impact of the district court's error limited to Step 1 of the *Mayo/Alice* test. Step 2 asks "what else is there" in the claims in addition to the abstract idea, and seeks to determine whether the claims preempt the public from practicing the entire abstract idea. Without first identifying the abstract idea as required in Step 1, the Step 2 analysis cannot be properly undertaken.

By abandoning its previous formulations of the purported abstract idea, Appellee failed to carry its high burden of proving, by clear and convincing evidence, that the asserted claims are directed to an abstract idea. Appellee's failure to carry its burden should, by itself, be dispositive of the issue. Appellee's motion for summary judgment should have been denied, and Appellant's motion for summary judgment on the same issue should have been granted, both on the grounds that Appellee had not introduced into the record sufficient evidence to carry its burden of proof. At the very least, this Court should now vacate and remand so the district court can properly perform the *Mayo/Alice* analysis, which requires expressly identifying a purported "abstract idea" at Step 1.[6] Because Step 2 depends entirely on the conclusion of Step 1, this Court should instruct the district court – if it identifies an "abstract idea" at Step 1 – to properly perform the Step 2 using the inentified "abstract idea.".

2. The Asserted Claims Are Not Directed to Mental Processes Which Can Be Performed Entirely in the Human Mind.

Appellee argued below – and the district court may have agreed – that the asserted claims were directed to patent-ineligible mental processes. The Supreme Court has stated that "[p]henomena of nature, though just discovered, *mental*

[6] Identification of the purported "abstract idea" should not be done for the first time by the Federal Circuit. To do so would deprive Appellant of a property right in the asserted patent claims without a chance to respond, and would thus violate Fifth Amendment due process.

processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work." *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). The Federal Circuit has held that mental processes constitute "a subcategory of unpatentable abstract ideas." *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371 (Fed. Cir. 2011). The prohibition against claiming mental processes is, however, limited in at least two important ways. First, the prohibition only applies to process claims, or to process claims in disguise. This line of reasoning has been applied regularly to process claims, but has been applied only twice outside the context of express process or method claims. In each case the Federal Circuit determined that the claims at issue were essentially method claims in disguise. *Id*. at 1374 ("It is clear that the invention underlying both claims 2 and 3 is a method for detecting credit card fraud, not a manufacture for storing computer-readable information."); see also *In re Abele*, 684 F.2d 902, 909 (C.C.P.A. 1982)("If the functionally-defined disclosed means and their equivalents are so broad that they encompass any and every means for performing the recited functions, the apparatus claim is an attempt to exalt form over substance since the claim is really to the method or series of functions itself."). Second, the prohibition only applies to process claims which can be performed *entirely* in the human mind. "Methods which can be performed entirely in the human mind are unpatentable not because there is anything wrong with

claiming mental method steps as part of a process containing non-mental steps, but rather because computational methods which can be performed *entirely* in the human mind are the types of methods that embody the basic tools of scientific and technological work that are free to all men and reserved exclusively to none." *CyberSource*, 654 F.3d at 1373 (emphasis in original)(citations omitted). Method claims which include both mental steps and physical steps do not violate this prohibition and thus remain patent-eligible. *Id*. at 1373, fn. 3 (citing *In re Abele*, 684 F.2d at 908).

Here, the asserted machine claims are plainly not directed to mental processes which can be performed entirely in the human mind. For example, asserted claims 30, 102 and their dependents all require that the claimed "limitation or restriction" is received, stored and utilized "automatically" by the bank central processing computer. The parties stipulated that "automatically" meant "without human intervention," and the district court accepted this construction. (D.I.124 at 1, fn. 1). While a bank central processing computer can operate "without human intervention," the human mind obviously cannot. These same claims require that the recited "limitation or restriction" is transmitted from a "communication device associated with an individual account holder" … "on or over the Internet or World Wide Web" to a "receiver" which, according to the district court's claim construction, is part of a bank central processing computer. D.I.124 at 9; JA0110.

These are clearly physical, non-mental requirements of the claims that cannot be performed exclusively in the human mind. The asserted claims further require that the "processing device" of the bank central processing computer "generates a signal containing information for [allowing/authorizing] or disallowing the transaction" (see also claim 317, "wherein the processing device … generates a signal corresponding to the transaction")(claim 414, "wherein the processing device generates a signal containing information regarding the banking transaction"). Many of the asserted claims require that a "transmitter" – which was also construed to be part of a bank central processing computer – "transmits" a "signal" containing information about a transaction to a "communication device associated with the individual account holder." (claims 31, 106, 317, 414.) The district court construed "signal" as recited in the asserted claims to mean "an electromagnetic transmission containing data or information." D.I.124 at 7; JA0108. The human mind simply cannot "generate" or "transmit" any of the claimed electromagnetic signals. The claimed "signal[s]" generated and transmitted by the central processing computer thus represent further physical, non-mental tasks which cannot have been "performed by humans for decades" as argued by Appellee. Asserted claims 317, 414 and their dependents require that the "signal" is transmitted to the claimed communication device on or over the Internet or World Wide Web. Again, this is a physical, non-mental task that cannot be

performed entirely in the human mind. Asserted dependent claim 34 requires that the transmitter of the central processing computer transmit "an electronic mail message." The district court construed "electronic mail message" to mean "a communication sent to an email address." D.I.124 at 10; JA0111. Transmitting an electronic mail message is another physical, non-mental task that cannot be performed exclusively in the human mind. Finally, dependent claims 343 and 416 each require that the transmitter transmit a claimed electromagnetic signal to a wireless device. Again, this is a physical, non-mental task that cannot be performed entirely in the human mind.[7] Each of these specific claim limitations insure that the asserted claims actually claim machines, and are not broad method claims in disguise. Further, these specific claim limitations demonstrate that the novel machines of the asserted claims perform numerous physical, non-mental tasks that cannot be performed exclusively in the human mind. The asserted claims thus plainly pass muster under *CyberSource* and are not directed to patent-ineligible mental processes.

The only way to conclude that the asserted claims merely recite computers performing tasks previously performed by humans is to ignore the specific

[7] It is also difficult to see how the tasks of transmitting signals over the Internet, transmitting electronic mail messages, or transmitting signals to wireless devices could have already been "performed by human beings for decades" as of the August 8, 1996 priority date of the '003 Patent.

limitations of the claims. But a characterization of the patent claims that omits limitations or steps, or seeks to recast the actual language of the claim, should be rejected for purposes of a § 101 analysis. See, e.g., *Ameranth*, 2014 WL 7012391 at *4-*6 (denying summary judgment motion under § 101 because defendant's characterization of invention omitted claim limitations). Similarly, it is inappropriate to evaluate patent eligibility based on an invention's purported "essence" or "gist." See *Aro Mfg. Co. v. Convertible Top Replacement Co.,* 365 U.S. 336, 345 (1961) ("there is no legally recognizable or protected 'essential' element, 'gist' or 'heart' of the invention"). A §101 analysis should not "take the claims to a higher level of abstraction than is warranted." *JP Morgan Chase & Co. v. Maxim Integrated Products, Inc.*, CBM2014-00179, Paper No. 11 at 35 (PTAB, Feb. 20, 2015). If it were proper to conduct a § 101 analysis based upon a simplified distillation or summary of claim language, then virtually no claim would survive, as "any claim can be stripped down, simplified, generalized, or paraphrased to remove all of its concrete limitations, until at its core, something that could be characterized as an abstract idea is revealed." *Ultramercial, Inc. v. Hulu, LLC,* 722 F.3d 1335, 1344 (Fed. Cir. 2013), *vacated on other grounds*, 134 S. Ct. 2870 (2014); see also *Mayo*, 132 S. Ct. at 1293 ("all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.").

Appellee argued to the district court that the asserted claims were roughly analogous to certain hypothetical interactions between Mr. Ashley, a hypothetical bank teller, and Ms. Samuels, a hypothetical account holder. In Appellee's examples, Ms. Samuels asks Mr. Ashley to stop payment on a check. He does so and then tells Ms. Samuels that he has done so. But Appellee's "Mr. Ashley" examples miss the mark. It is only by ignoring the specific limitations of the claims that Appellee was able to argue – and the district court evidently agreed – that these hypothetical interactions were representative of the asserted claims. In fact, the asserted machine claims include numerous limitations lacking any counterpart in Appellee's examples. In Appellee's "Mr. Ashley" examples, the "limitation or restriction"[8] of claims 30, 102 and their dependents is spoken by Ms. Samuels to Mr. Ashley, but is not transmitted from a communication device associated with Ms. Samuels, is not transmitted over the Internet, and is not received, stored, and used by Mr. Ashley "automatically," since Mr. Ashley necessarily applies "human intervention." Nor does Mr. Ashley "generate" an electromagnetic "signal containing information for allowing or disallowing the banking transaction" as

[8] The district court mistakenly identifies a stop payment on a check as a "limitation or restriction" as recited in asserted claims 30, 102, and their dependents in the '003 Patent. A stop payment is not a "limitation or restriction" as claimed and JHA's own expert agreed that it was not. See Calman Depo, Sep. 16, 2014 Tr. at 170:22-24; 191:7-14 (JBTS-2018-2022; JA0598-JA0601). For this additional reason, Appellee's "Mr. Ashley" example is inapposite.

required by the district court's claim construction. For claim 317, Mr. Ashley is not an input device or a data entry device and does not input or enter transaction information into an apparatus. Mr. Ashley's mind does not "generate" an electromagnetic "signal corresponding to the transaction," and cannot do so "independently of the central transaction processing computer." Mr. Ashley certainly does not "transmit" electromagnetic signals to "a communications device associated with" Ms. Samuels on or over the Internet or World Wide Web. A person's mind cannot, of course, send signals over the Internet to pagers, computers, televisions, watches, faxes or any of the other "communication devices" listed in claim 317. Similarly, for claim 414, Mr. Ashley's mind cannot "generate" an electromagnetic "signal containing information regarding a banking transaction," cannot transmit that signal to a "network computer" in "real time," and cannot transmit the information regarding the banking transaction to a communications device associated with Ms. Samuels on or over the Internet or World Wide Web. Indeed, Appellant argued below, and the district court agreed, that Appellee's "Mr. Ashley" examples did not satisfy any of the limitations of any of the asserted claims. (D.I.173 at 9-10 - see JA0712-JA0713; D.I.238 at 13-14 – see A-014-A-015). These hypotheticals are thus entirely inapposite, and cannot serve to demonstrate that the asserted claims are abstract.

3. The Novel Machines Of The Asserted Claims Improve Upon and Provide Significant Benefits Over Existing Remote Banking Technology.

In asserted claims 30, 102 and their dependent claims, the claimed "limitation or restriction" comes directly from the account holder, and is received, stored and used in transaction processing automatically, without any intervention from the bank. The account holder provides the "limitation or restriction," and the account holder does not have to appear at the bank, physically sign anything, or ask permission from anyone at the bank, in order for the limitation or restriction to be applied to their account. The apparatuses of the asserted claims put the account holder directly in charge of approving transactions processed on their account, rather than requiring the account holder to rely on a bank's default transaction processing limits, or ask the bank's permission to apply individualized limitations or restrictions to their account. As discussed in the specification, an "object of the present invention" is to "provide an apparatus … which is programmable with respect to authorized times of usage (i.e. specific days, dates, time of day, time of month, year, etc.), and/or any other limitations regarding amount of transaction limitations, parties involved, and/or geographical area and/or location of allowed usage." col. 12:9-17; JA0065. This gives an account holder far more control over their account than was available with prior art systems. Further, in the asserted claims, the limitation or restriction is sent from the account holder's

communication device, in many cases over the Internet or World Wide Web, and can thus be sent from anywhere at any time.

To put this in the context of Appellee's "Mr. Ashley" example, the appropriate analogy is not Ms. Samuels appearing at the bank, in person, during banker's hours, and asking a teller's permission to stop payment on a check. Instead, asserted claims 30, 102 and their dependents allow Ms. Samuels to perform the bricks-and-mortar equivalent of using her own key to enter the bank at midnight while it is closed, sit down at the bank's central processing computer, and write code to change the rules for her checking account to no longer cash checks written to a particular payee, or to no longer authorize transactions originating from a particular retail store. That is not merely using a computer to do things that had long been done by humans, as Appellee has argued. The asserted claims use new and novel machines to allow the account holder to do things that were never before possible.

Moreover, in asserted claims 31, 102, 317 and its dependents and 414 and its dependents, information regarding a transaction is sent directly to a device (a network computer or a communication device) associated with an individual account holder. In claim 317 and its dependents this information is sent over the Internet and is transmitted "independently of any processing of the central transaction processing computer." In claim 414 and its dependents, the

information is transmitted over the Internet and is sent to a "network computer" in "real time." In each of these claims, information regarding a transaction is conveyed quickly, conveniently and securely to the account holder, without the account holder having to appear at the bank, speak to a bank employee, and without having to wait for a monthly statement to arrive in the mail. This new technology solved an existing problem – fraud – by using new and novel machines to give account holders ready access to account information which was not available with prior art banking systems. This readily-provided information allows account holders to monitor transactions and identify fraudulent activity much sooner than was possible with the longstanding account and transaction notifications criticized in the specification. Appellee argues this is no different than Mr. Ashley encountering or calling and speaking with Ms. Samuels. D.I.139 at 17-18; JA0273-JA0279. But this is exactly the sort of notification criticized throughout the specification. The true prior art equivalent would require Mr. Ashley to call Ms. Samuels to discuss every transaction processed on her account, and to do so quickly, otherwise Ms. Samuels could not identify fraudulent transactions in time to prevent additional losses. There is no evidence in the record that banks made such frequent calls prior to the invention of the asserted claims.

Moreover, in the asserted claims, the bank central processing computer communicates over the Internet with a communication device or network computer

"associated with an individual account holder." The district court construed this to mean "a communication device having a pre-recognized, pre-registered, or linked relationship with an individual account holder." D.I.124 at 15-16. As described in the specification, "[t]he central processing computer may then also transmit respective signals and/or data to any one or more of the cardholder's designated [communication devices]." (col. 6:15-21; JA0062). Because the limitations or restrictions of claims 30, 102 and their dependents are sent from a communication device "associated with" the account holder, the limitation or restriction can be trusted as authentic, and "automatically" applied to the account without further intervention by the bank. Similarly, because the various notification signals of the asserted claim are sent to a device "associated with" the account holder, sensitive information about financial transactions can be sent to an account holder securely. Appellee's hypothetical "Mr. Ashley" scenario offers nothing to address the authentication and security risks solved by the asserted claims.

The apparatuses of the claimed invention enable exactly the kind of practical protections necessary for secure online banking, which are today expressly recommended by government banking regulators. The Federal Financial Institutions Examination Council ("FFIEC"), for example, currently recommends that financial institutions provide account holders with "enhanced controls over account activities, such as transaction value thresholds, payment recipients,

number of transactions allowed per day, and allowable payment windows (e.g., days and times)." See JA0676. These are exactly the kinds of limitations and restrictions allowed by the apparatuses of asserted claims 30, 102 and their dependent claims. (See e.g. claim 122.) The same FFIEC guidance recommends "the use of out-of-band verification for transactions," which "means that a transaction that is initiated via one delivery channel (e.g., Internet) must be re-authenticated or verified via an independent delivery channel (e.g., telephone)." *Id; id*. at 14. Again, this is exactly the kind of security protection enabled by the apparatuses of the asserted claims, which created a new communications pathway thereby enabling these out-of-band communications. The same FFIEC guidance today recommends "device identification" as a means of authenticating users (*id*. at 9), which is yet again exactly the sort of security protection enabled by the asserted claims, as they recite communication devices "associated with" individual account holders. These facts demonstrate that the novel apparatuses of the asserted claims improved upon existing technology, so much so that the novel economic practices allowed by these claims have now become recommended security practices for financial institutions operating in an Internet banking environment.

4. The Asserted Claims Are Not Directed to Any of the Categories of Ineligible Subject Matter Identified in Prior Cases.

The asserted claims are plainly not directed to laws of nature or natural phenomena. Nor do they recite a mathematical equation. The only way to find the

asserted claims "abstract" is to find they are directed to a longstanding economic practice. In *Bilski*, the Supreme Court expressly rejected a general business method exception to patent eligibility. *Bilski*, 561 U.S. at 606-607. Some economic method claims (much less apparatus claims like those asserted here) thus remain patentable. The Court in *Bilski* went on to find that hedging "is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class" and was therefore an abstract idea. *Id.* at 611. Similarly in *Alice*, the Supreme Court found that "the concept of intermediated settlement is a fundamental economic practice long prevalent in our system of commerce." *Alice*, 134 S. Ct. at 2356. Accordingly, not all claims covering a business practice are directed to abstract ideas. Only those claims directed to "a fundamental economic practice long prevalent in our system of commerce" are directed to an ineligible abstract idea.

The Federal Circuit has stated that "laws of nature, natural phenomena, and abstract ideas, no matter how groundbreaking, innovative or even brilliant," are outside the scope of § 101. *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1352 (Fed. Cir. 2014). Appellee may argue that this means the novelty of the abstract idea is irrelevant to the § 101 inquiry. Novelty may be irrelevant for laws of nature, natural phenomena, and certain abstract ideas like mathematical equations, where the ineligible concept is discovered rather than created by the patentee. With

respect to economic practices, however, novelty must be considered at Step 1 of the *Mayo/Alice* analysis. Because only "fundamental economic practices long prevalent in our system of commerce" are abstract, the novelty of an economic or business practice must be considered in order to determine whether it constitutes an abstract idea in the first place. Even in *buySAFE*, the Federal Circuit assessed the novelty of the economic practice, holding that the claims were directed to "creating a contractual relationship – a transaction performance guaranty – that is beyond question of ancient lineage." *Id*. at 1354; accord *DDR Holdings v. Hotels.com L.P.*, 773 F.3d 1245, 1256-1257 (Fed. Cir. 2014)(holding that, while "some fundamental economic and conventional business practices are also abstract ideas," the claims at issue were patent eligible because they "do not recite a fundamental economic or longstanding commercial practice."). To find otherwise would amount to a categorical prohibition of business method patents, a notion the Supreme Court has already rejected.

Here, the asserted claims are not directed to fundamental economic practices long prevalent in our system of commerce. Instead, the novel apparatuses of the asserted claims allow banks and account holders to engage in new economic practices which were not previously possible. It is difficult to see how the asserted claims could be directed to long-standing economic practices foundational to the economy, when Appellee has conceded its § 102 defense and admitted that no

prior art anticipates any of the asserted claims. Nor can Appellee credibly argue that, as of August 8, 1996, transmitting a limitation or restriction from a communications device associated with an individual account holder over the Internet for automatic receipt, storage and use by a bank central processing computer was a long-standing economic practice. Certainly transmitting "electronic mail messages" (claim 34), transmitting signals "independently of any processing of the central transaction processing computer" (claim 317), transmitting signals to a "network computer" in "real time" (claim 414) and transmitting signals over the Internet to a wireless communication device associated with an individual account holder (claims 343, 416) were not long-standing economic practices as of August 8, 1996. Further, if the asserted claims merely recited economic practices that were longstanding as of August 8, 1996, the FFIEC would not have needed to include the security techniques enabled by the novel machines of the asserted claims as recommended best practices 15 years later in 2011. The asserted claims do "not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet." *Id.* The specific limitations of the asserted claims recite apparatuses "rooted in computer technology" that enable business practices which were not possible before their invention.

B. The Asserted Claims Recite An Inventive Concept And Do Not Monopolize Any Abstract Idea

Even if Appellee and the district court were correct, and the asserted claims are somehow directed to an "abstract idea," the claims would nevertheless still be patentable. This is because, under Step 2 of the *Mayo/Alice* framework, the limitations of each asserted claim transforms the claim to such an extent that each individual claim covers at most a patent-eligible application of an abstract idea. *Alice*, 134 S.Ct. at 2355. Indeed the district court opinion expressly acknowledged as much. Moreover, Appellee conceded below that the asserted claims do not preempt the public from practicing any abstract idea. (D.I.173 at fn. 12). This concession alone compels a conclusion that the asserted claims survive Step 2 of the *Mayo/Alice* analysis.

1. The Asserted Claims Do Not Monopolize Any Abstract Idea.

In explaining the reason for the judicially created exceptions to § 101, the Supreme Court has held that "the concern that drives this exclusionary principle [is] one of preemption." *Alice*, 134 S.Ct. at 2354-2355 (quoting *Bilski*, 561 U.S. at 611-612 (upholding the patent "would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea")). The Supreme Court has "repeatedly emphasized this … concern that patent law not inhibit further discovery by improperly tying up the future use of" these building blocks of human ingenuity. *Alice*, 134 S.Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1301

(citing *O'Reilly v. Morse*, 15 How. 62, 113 (1854)). "The pre-emption concern" is ultimately the principal which "undergirds [the Supreme Court's] § 101 jurisprudence." *Alice*, 134 S. Ct. at 2358. In *Alice*, the Supreme Court stated that patent claims "which integrate the building blocks into something more … pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws." *Id*. at 2347, 2354 (citations omitted).

The Supreme Court has described Step 2 of the *Mayo/Alice* analysis as a search for "additional features to ensure that the claim is more than a drafting effort designed to monopolize the abstract idea." *Id.*, at 2357 (citing *Mayo*, 132 S. Ct. at 1294, 1297-1298). The question to be answered is whether the claims provide substantial limitations so that the patent does not cover all of the abstract idea. *Accenture Global Servs.*, 728 F.3d at 1341; see also *buySAFE*, 765 F.3d at 1352 ("If enough extra is included in a claim, it passes muster under § 101"); *DDR Holdings*, 773 F.3d at 1257 (claims patent eligible because they "do not attempt to preempt every application of the [abstract idea].").

Of course, "[b]y definition, every patent preempts an area of technology." *California. Inst. of Tech.*, 2014 WL 5661290 at *12. Courts must therefore "be wary of facile arguments that a patent preempts all applications of an idea. It may often be easier for an infringer to argue that a patent fails § 101 than to figure out a different way to implement an idea." *McRo, Inc. v. Namco Bandai Games*

America, Inc., Case No. CV 12–10322–GW (FFMx), 2014 WL 4749601, *7 (C.D. Cal. Sep. 22, 2014) (internal citations and quotations omitted). "[I]nventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract that they override the statutory language and framework of the Patent Act." *Research Corp.*, 627 F.3d at 869. Therefore, where patent claims are directed to a particular technological improvement in a particular field, and do not attempt to cover the field itself, there is no risk of preemption. See, e.g., *DDR Holdings*, 773 F.3d at *12; *Intellectual Ventures I LLC v. Mfrs. & Traders Trust Co.*, Civ. No. 13-1274-SLR , 2014 WL 7215193, *9 (D. Del. Dec. 18, 2014) ("The claims do not preempt all applications of providing customized web pages, as they recite a specific method of customizing web pages . . . ."); *Fairfield Indus., Inc. v. Wireless Seismic, Inc.*, Case No. 14-CV-2972, 2014 WL 7342525, *6 (S.D. Tex. Dec. 23, 2014) (claims eligible because they include "additional elements" which "narrow the scope of the claim, and minimize the risk of preemption.").

Appellee did not carry its heavy burden of proving by clear and convincing evidence that the asserted claims lack "additional features" and therefore "monopolize the abstract idea." In fact, Appellee did not even try to carry this burden, and instead argued incorrectly that the asserted claims need not monopolize an abstract idea to be found invalid under *Alice*. (D.I.173 at 10, fn. 12; JA0713). Contrary to Appellee's argument below, preventing patentees from

monopolizing abstract ideas is the point of the *Mayo/Alice* analysis. Appellee's failure to demonstrate or even argue preemption below should have resulted in Appellee's motion for summary judgment being denied, and Appellant's motion granted, thus ending the §101 inquiry.

Moreover, the detailed, specific apparatus claims asserted here simply do not monopolize or pre-empt the public from practicing any of Appellee's broad abstract ideas. Instead, the specific limitations of each individual claim, considered both individually and as an ordered combination, demonstrate that the claimed machines are, at the very least, a patent-eligible application of an abstract idea. The asserted claims are narrowly drawn, and there are simple ways to avoid infringing them. For example, a bank could obviously communicate with its account holders in person, by mail, or over the telephone without infringing any of the asserted claims. Considering only computer-based examples, banks could continue employing any of the computer-based prior art systems Appellee relied on for its § 103 argument, including the systems described in U.S. 6,182,052 to Fulton (JA0413-JA0434), U.S. 5,220,501 to Lawlor (JA0901-JA0980), U.S. 5,708,422 to Blonder (JA0877-JA0900), or even Appellee's own computer-based Cash Management system. See JA0725-JA0850. Since Appellee has conceded that neither these nor any other prior art system anticipates the asserted claims, it is

undisputed that banks could continue to employ these and other prior art computer systems without infringing the narrow asserted claims.

A bank could also develop a new system, but could use the direct-dial, modem-to-modem communications of Appellee's Cash Management system, or the then-conventional x.25 communications network of Mr. Fulton's patent, rather than the Internet and thereby avoid infringement of every asserted claim. A bank could avoid infringing claims 30, 102 and their dependents by accepting limitations or restrictions entered by account holders into ATMs, rather than from communication devices "associated with" an individual account holder. Even banks employing an Internet-based system could avoid infringing claims 30, 102 and their dependents simply by requiring that the claimed limitations or restrictions be approved by bank employees before they are applied to the account, rather than being received, stored and used "automatically." Further, Appellant investigated a number of Appellee's modern-day accused systems, and ultimately determined these systems did not infringe the asserted claims. Appellant therefore removed systems such as Yellow Hammer Fraud Detective, Yellow Hammer EFT Fraud Detective, Remote Deposit Capture, Merchant Deposit Capture, and a number of jhaPassPort systems from its list of accused products and services. For certain asserted claims, Appellee or a hypothetical bank could avoid infringement by, for example, not sending communications in real time (claim 414), by sending

notifications to an account holder's wired rather than wireless device (claims 343, 416), or simply by not sending electronic mail messages (claim 34). These examples demonstrate that the asserted claims easily avoid the primary concern of the *Mayo/Alice* analysis, that of preemption of basic principles such that innovation is impeded. *Alice*, 134 S.Ct. at 2354. The asserted claims are therefore patentable under Step 2 of the Mayo/*Alice* test.

2. The District Court Erred In Finding The Asserted Claims Tie Up Future "Innovations Related To Performing Banking Transactions On Computers."

The district court erred in finding that "allowing the asserted claims to survive would tie up any innovation related to performing banking transactions on computers which would, in turn, monopolize the 'abstract idea.'" D.I.238 at 17 (A-018). It is difficult to evaluate this conclusion because the district court did not previously identify the "abstract idea." If the as-yet unidentified "abstract idea" is something other than "performing banking transactions on computers," then the district court is asking the wrong question. The district court should have asked at Step 2 whether the "abstract idea" has been monopolized by the claims, and not whether some potentially related notion is improperly preempted. If, on the other hand, the district court is saying that "performing banking transactions on computers" is the "abstract idea," then the conclusion is simply incorrect. None of the asserted claims even come close to preempting all forms of "performing

banking transactions on computers." Identifying a broad "abstract idea" at Step 1, like "performing banking transactions on computers," necessarily means that any particular claim is less likely to improperly monopolize the abstract idea at Step 2. A specific claim is more likely to be a patentable application of the broad abstract idea. Here, each asserted claim is at most a very specific application of the "abstract idea" of "performing banking transactions on computers." Indeed, the district court implicitly acknowledged as much, noting that claim 422 for example "describes a specific use of the processing device, thereby describing a particular application of the 'abstract idea.'" D.I.238 at 18. Under the Supreme Court's §101 jurisprudence, claims directed to particular applications of abstract ideas "pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws." *Alice*, 134 S. Ct. 2347, 2354 (citations omitted). Each and every one of the asserted claims recite "a specific use of the processing device," and are therefore, according to the district court's decision, a patent-eligible application of an abstract idea.

3. The Asserted Claims Recite A Very Specific "Transaction Security Apparatus," Not A Generic Computer.

Importantly, nothing in *Alice* suggests that the use of a computer or computer-related concepts in a patent claim transforms the subject matter into something abstract and patent ineligible. Rather, the *Alice* Court narrowly ruled that "the mere recitation of a generic computer cannot transform a patent-ineligible

abstract idea into a patent-eligible invention." *Alice*, 134 S. Ct. at 2358. At the same time, the Court recognized that the use of a computer to "improve the functioning of the computer itself" or to "effect an improvement in any other technology or technical field" is patent eligible subject matter. *Id.* at 2359; see also *Diehr*, 450 U.S. at 187 ("A claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a . . . computer program . . . or digital computer."). The Federal Circuit has also found claims to be patent eligible in "cases where, as a practical matter, the use of a computer is required to perform the claimed method," including claims involving "the manipulation of computer data structures" or "the output of a modified computer structure" where "the method could not, as a practical matter, be performed entirely in a human's mind." *Cybersource Corp.*, 654 F.3d at 1376 (discussing the patent-eligible claims in *Research Corp.*, 627 F.3d at 868); see also *DDR Holdings*, 773 F.3d at *10 (finding claim patent eligible where "the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks"). "[P]atents should encourage inventors to create new computing solutions to today's computing problems. . . . [I]t at least must be true that § 101 protects a unique computing solution that addresses a unique computing problem." *California. Inst. of Tech.*, 2014 WL 5661290 at *20.

Here, the asserted claims expressly recite very specific computers. The district court incorrectly concluded that the computer components recited individually in the asserted claims are generic. This is not so. For example, the "processing device" of the asserted claims is not generic. As the district court correctly recognized, the processing device of the asserted claims is part of a "central processing computer" and is "not merely the central processing unit (CPU)." D.I.124 at 13. Rather, the claimed processing device consists of both the hardware components (CPU, RAM, ROM, Database) and software of the central processing computer which "utilizes, generates, authorizes, disallows and determines what is done with transactions and information about transactions." *Id*. at 13-14 (citations omitted). Accordingly, the "processing device" of the asserted claims is not merely a generic CPU. Nor is the processing device used merely to perform "basic functions" as the district court held. On the contrary, according to the district court's own claim construction order, the processing device of the asserted claims "utilizes, generates, authorizes, disallows and determines what is done with transactions and information about transactions," none of which are "basic functions" which can be "achieved by any general purpose computer without special programming." D.I.124 at 13-14; D.I.238 at 15 (quoting *In re Katz*, 639 F.3d 1303, 1316 (Fed. Cir. 2011). The "processing device" of the asserted claims is therefore not a generic computer component.

Moreover, the district court erred in focusing exclusively on individually-recited computer components, and entirely failed to consider the "ordered combination" of the limitations of the asserted claims as required by the Supreme Court. Here, the "processing device" of the asserted claims does not function simply as an individual computer component. Rather, as recognized by the district court's claim construction, the processing device is "part of the central processing computer." D.I.124 at 13 (JA0114). Although required in every claim by the claim construction order, the district court opinion did not consider whether the "central processing computer" of the asserted claims was a generic computer or not. In fact, the "central processing computer" of the asserted claims is not a generic computer, but rather a specific device including the components shown in Figures 2, 5 and 8 of the '003 Patent. (JA0044. JA0049, JA0054; D.I.124 at 13; JA0114). The central processing computer "process[es] the information and/or data pertinent to the transaction and to the particular account." col. 25:16-18.; JA0072 It does so using "data processing and/or software routines" known in the art, in order to process transaction requests and authorizations "in conjunction with the account information in order to determine the status of the account." *Id*. at 25:18-27. This is a specific computer programmed with specific software to perform specific functions in a specific transaction processing environment, and includes far more than just the basic function of any generic computer.

Surprisingly, the district court did not consider whether the "communication device associated with an individual account holder" that is recited in every asserted claim constitutes a generic computer. Every claim requires that the claimed "communication device" be capable of receiving and/or transmitting signals over the Internet. The district court's claim construction further requires that the "communication device associated with an individual account holder" has a "pre-recognized, pre-registered, or linked relationship with an individual account holder." D.I.124 at 15-16. Many of the asserted claims are limited to very specific lists of communications devices, such as a beeper, an interactive television, a mobile telephone (claims 317, 414 and their dependents) In certain claims, these lists are then further limited to wireless versions of the listed devices (claims 343, 416). Appellee did not argue, and the district court did not find that these claimed "communication devices" were generic computers. The record on appeal cannot support such a conclusion either. The "communication device associated with an individual account holder" recited in every claim is enough to demonstrate that the claims are not ineligibly abstract.

The district court also did not address whether the "network computer" of claim 414 and its dependents was a "generic computer." The district court held at claim construction, however, that "network computer" was "a term of art used throughout the computer industry in the mid-to late 1990's that referred to a

computing device capable of running its operating system but reliant upon an outside network for software, data storage, and data processing." D.I.124 at 12 (JA0113). The district court further noted that a network computer "is distinguishable from a personal computer." *Id*. This device is plainly not a generic computer, but rather a very particular species of computer. The "network computer" recited in claim 414 and its dependents is enough to demonstrate that these claims are not ineligibly abstract.

Finally, the district court erred in failing to consider claims as a whole. When properly considered, the claimed apparatuses as a whole do not constitute generic computers. In each asserted claim, the apparatus consists of at least a bank central processing computer communicating via the Internet with a communication device associated with an individual account holder. In some claims the central processing computer transmits emails (claim 34). In some claims the communication device is a wireless device (claims 343, 416). In other claims signals are transmitted to a "network computer" (claim 414 and its dependents). Even if individual components of these apparatuses are deemed generic, the record does not support a conclusion that the claimed apparatuses as a whole can be considered merely generic computers.

4. The Asserted Claims Recite More Than "Conventional" Activity.

Finally, the asserted claims recite a number of technologies that were far from conventional in 1996. For example, it was not at all conventional in 1996 for a bank's central processing computer to automatically accept a limitation or restriction sent from a communication device associated with an individual account holder via the Internet. Indeed it was far more common for a bank to define limitations and restrictions for all account holders by default. Cheng Decl. ¶¶ 49-50; JA0234. As another example, it was not at all conventional in 1996 for a bank's computer to transmit information regarding a transaction to an account holder's communications device as recited in claims 31, 34, 106, 317 and its dependents and 414 and its dependents. It was certainly not conventional in 1996 for a bank's computer to communicate with an account holder's communications device over the Internet as required by all asserted claims, or to process Internet transactions as required by claim 324. Nor was it conventional for a bank central processing computer to transmit electronic mail messages as required by claim 34, or to communicate with an account holder's wireless device as required by claims 343 and 416. *Id*. at ¶ 50.

The fact that the asserted claims recite unconventional technology is demonstrated in part by Appellee's undisputed failure to identify prior art which anticipates the asserted claims. It is difficult to see how Appellee can conclude that

the asserted claims recite conventional technology and not inventive apparatuses when Appellee has conceded that the asserted claims are not even arguably anticipated. Moreover, Appellee and its expert, Dr. Kursh, argued before the district court that the asserted claims were not enabled because a person of ordinary skill in the art would not know how to program the claimed "processing device" of the central processing computer to perform the claimed tasks. Kursh Rpt. ¶¶84-94; JA0321-JA0325. Appellee cannot advance this enablement argument while simultaneously contending that the claims recite nothing more than conventional technology used in known ways. Appellee's argument that the claims merely recite conventional technologies is also undercut by the fact that the FFIEC took 15 years to catch up to the asserted claims, and only began recommending the practices enabled by the apparatuses of the asserted claims in 2011. Finally, Appellee's argument that the claims merely recite conventional technology is proved incorrect by the failures of others to develop such systems earlier. Appellee itself claims that it began working on an Internet-based banking solution in 1995 (D.I.139 at 27, fn. 22; JA0283), but not begin adapting the functionality of its prior art Cash Management system to operate on the Internet until 1997, (Henley Depo., May 15, 2014, 153:12-25; 154:10-156:25; see JA0614-JA0618; Henley Exhibit 9; see JA0619-JA-0620; Nicholas Depo., Mar. 6, 2014, 30:1-17; see JA0614-JA0618, and admittedly failed to launch its actual Internet-based

remote banking product until Fall 1998. (Nicholas Depo., May 2, 2014, 90:15-91:13; see JA0630-JA0639; see also D.I.139 at 4-5, fn. 6; JA0260-JA0261 (conceding that NetTeller Cash Management was "developed by Jack Henry in 1998 and thereafter.")). The prior art system of Appellee's invalidity expert, Mr. John Fulton, was also a failure, and never got out of the prototype stage.[9] (Fulton Depo., Sep. 2, 2014, 157:6-158:1; see JA0602-JA0613.) Appellee's lengthy development process, and its expert's failure in this field, refute the notion that the asserted claims merely recite conventional technology.

At the very least, the evidence of record presents disputed questions of fact about what was and was not conventional as of August 8, 1996. The Federal Circuit has recently emphasized that "the analysis under § 101, while ultimately a legal determination, is rife with underlying factual issues." *Ultramercial*, 722 F.3d at 1339 (emphasis added). The Federal Circuit has identified many reasons the § 101 inquiry is inherently fact specific:

> [T]here is no doubt the § 101 inquiry requires a search for limitations in the claims that narrow or tie the claims to specific applications of an otherwise abstract concept. Further, factual issues may underlie determining whether the patent embraces a scientific principle or abstract idea. ***If the question is whether "genuine human contribution" is required, and that requires "more than a trivial appendix to the underlying abstract idea," and were not at the time of filing "routine, well-understood, or***

[9] The Fulton prior art system would have to be entirely redesigned to operate over the Internet. D.I. 159, at p. 14-15, JA0571.

> ***conventional," factual inquiries likely abound. Almost by definition, analyzing whether something was "conventional" or "routine" involves analyzing facts. Likewise, any inquiry into the scope of preemption – how much of the field is "tied up" by the claim – by definition will involve historic facts: identifying the "field," the available alternatives, and preemptive impact of the claims in that field***.

Id. (internal citations omitted) (emphasis added). Here, the underlying factual issues are disputed by Appellant and its expert, thereby making summary judgment of invalidity under §101 inappropriate. See *France Telecom S.A. v. Marvell Semiconductor Inc.*, Case No. 12-CV-04967-WHO, 2014 WL 1478850, *11 (N.D. Cal. Apr. 14, 2014) (where one party's expert was "directly controverted" by the other, "[t]his is a material issue of fact sufficient to defeat summary judgment" of patent invalidity under § 101); *TQP Dev., LLC v. Intuit Inc.*, No. 12-CV-180, 2014 U.S. Dist. LEXIS 20077, *17-18 (E.D. Tex. Feb. 19, 2014) ("While the defendants assert that the encryption and decryption process can be performed in the human mind or with pencil and paper, TQP has offered evidence to the contrary, in the form of an expert's declaration. That factual dispute by itself is enough to foreclose the entry of summary judgment in the defendants' favor on the present record."). Because questions of fact must be construed in Appellant's favor at summary judgment, Appellee's motion for summary judgment should not have been granted.

II. THE DISTRICT COURT ERRED IN GRANTING APPELLEE'S MOTION FOR SUMMARY JUDGMENT OF NONINFRINGEMENT

The district court did not substantively address the parties' motions concerning infringement, but granted Appellee's motion and denied Appellant's motion, stating:

> The claims are invalid and, therefore, not infringed. *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1320 (Fed. Cir. 2009) ('invalid claim[s] cannot give rise to liability for infringement') (citation omitted). For this reason, the court grants defendant's motion for summary judgment of non-infringement and denies plaintiff's motion for summary judgment of infringement.

D.I.238, p. 19, fn 10; A-020. This conclusion is not correct. The omitted citation in the district court's statement above is to *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 1583 (Fed. Cir.1983) which states that "[t]hough an invalid claim cannot give rise to liability for infringement, whether it is infringed is an entirely separate question capable of determination without regard to its validity." Accord, *Lazare Kaplan Intern., Inc. v. Photoscribe Technologies, Inc.*, 714 F.3d 1289, 1295 (2013); accord. *Pandrol USA, LP v. Airboss Ry. Products, Inc*., 320 F.3d 1354, 1365 (2003); but see *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1580 (Fed.Cir.1983) ("The claim being invalid there is nothing to be infringed."). The district court's grant of summary judgment of noninfringement to Appellee and denial of partial summary judgment of infringement to Appellant should thus be vacated regardless of the outcome of the validity issues in the present appeal. If

the Federal Circuit agrees with the district court and determines that invalid claims cannot be infringed, the district court's infringement rulings were still a consequence of the finding of invalidity only and should be vacated if the district court's invalidity determination is reversed.

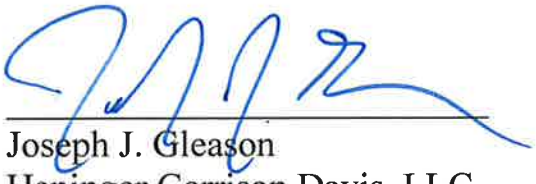
III. CONCLUSION

The asserted claims recite patent eligible subject matter under 35 U.S.C. § 101. At Step 1 of the *Mayo/Alice* analysis, neither Appellee nor the district court were able to identify an abstract idea to which the claims were purportedly directed. That is because the asserted claims recite novel apparatuses that solve then-existing fraud and security problems using specific devices connected via the Internet. Even if the asserted claims were somehow directed to an abstract idea, they would nevertheless survive Step 2 of the *Mayo/Alice* analysis because they do not monopolize the entirety of any abstract idea and instead at most claim patent-eligible applications of abstract ideas. Indeed, Appellee conceded below that the asserted claims do not monopolize any abstract idea, and the district court concluded that claims which "describe a specific use of the processing device" represent "a particular application of the 'abstract idea' discussed above." On this record, the asserted claims easily pass Step 2 of the *Mayo/Alice* test. Finally, the district court's rulings on the parties' motions for summary judgment of

noninfringement should be vacated, particularly if this Court reverses or vacates the district court's findings concerning §101 invalidity.

Dated: March 18, 2015

Respectfully submitted,



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No. 2015-1245

IN THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

JOAO BOCK TRANSACTION SYSTEMS, LLC

Plaintiff-Appellant,

v.

JACK HENRY & ASSOCIATES, INC.,

Defendant-Appellee.

Appeal From The United States District Court
For The District of Delaware In Case No. 1:12-cv-01138-SLR,
Honorable Sue L. Robinson

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INDEX OF ADDENDUM

RANGE	DESCRIPTION
A-001 – A-020	"Memorandum Opinion" filed on December 15, 2014 (D.I. 238) in Case No. 1:12-cv-01138-SLR (D. Del.)
A-021 – A-022	"Order" filed on December 15, 2014 (D.I. 239) in Case No. 1:12-cv-01138-SLR (D. Del.)
A-023 – A-023	"Judgment In A Civil Case" filed on December 18, 2014 (D.I. 241) in Case No. 1:12-cv-01138-SLR (D. Del.)

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

JOAO BOCK TRANSACTION SYSTEMS, LLC,	)	
Plaintiff,	)	
v.	)	Civ. No. 12-1138-SLR
JACK HENRY & ASSOCIATES, INC.,	)	
Defendant.	)	

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MEMORANDUM OPINION

Dated: December 15, 2014
Wilmington, Delaware

ROBINSON, District Judge

I. INTRODUCTION

On September 14, 2012, Joao Bock Transaction Systems, LLC ("plaintiff") filed a complaint against defendant Jack Henry & Associates, Inc. ("defendant"), alleging that certain of defendant's products, "such as but not limited to its 'goDough' and 'NetTeller Online Banking'" products, infringe the '003 patent. (D.I. 1) On December 3, 2012, defendant answered and counterclaimed for declaratory judgment of invalidity. (D.I. 6) On June 13, 2013, the court denied plaintiff's motion to dismiss the counterclaim and granted defendant's motion for leave to file an amended counterclaim, which was filed the same day. (D.I. 30; D.I. 32) On June 27, 2013, plaintiff answered the counterclaim. (D.I. 33) The court issued its claim construction order on June 30, 2014 and denied defendant's motion for summary judgment of invalidity based on collateral estoppel. (D.I. 124)

Presently before the court are the parties' competing motions for invalidity and validity (D.I. 138; D.I. 142) and competing motions for infringement and non-infringement (D.I. 146; D.I. 149). Plaintiff has filed a motion to strike defendant's motion for summary judgment of invalidity (D.I. 157) and a motion to strike portions of defendant's motion for summary judgment of non-infringement and portions of defendant's opposition to plaintiff's motion for summary judgment of infringement (D.I. 196). Defendant has filed a motion to strike new infringement theories and product functionality (D.I. 152) and a motion to strike portions of the expert infringement report of Alex Cheng (D.I. 181). The court has jurisdiction over this matter pursuant to 28 U.S.C. §§ 1331 and 1338(a).

II. BACKGROUND

A. The Parties

Plaintiff is a limited liability company organized under the laws of the State of Delaware. It maintains its principal place of business in Yonkers, New York. Its principal owner is Raymond Joao who is a licensed patent attorney and the inventor of the '003 patent. (D.I. 1 at ¶¶ 1-2)

Defendant is a banking software development corporation duly organized and existing under the laws of the State of Delaware, having a place of business located in Monett, Missouri. Defendant creates software solutions for smaller community and regional banks. Defendant conducts business through its website www.jackhenry.com and has several products including, but not limited to, "Cash Management," "goDough®," and "NetTeller Online Banking™." These products enable banking customers to perform online banking transactions using mobile phones and/or home computers. (D.I. 1 at ¶¶ 3; D.I. 32 at 1-2)

B. Technology Overview

The '003 patent, titled "Transaction Security Apparatus," was filed on September 10, 2001 and issued on August 22, 2006. The patent is directed to an apparatus and a method for the real-time authorization, notification and/or security of financial transactions involving credit cards, charge cards, debit cards, and/or currency or "smart" cards that enable a cardholder to monitor, in real-time, all activity involving his or her card(s) and the corresponding account numbers. The invention adds transaction security by allowing interaction between the central processing computer and a

communication device to enable the point-of-sale terminal operator or the card holder to allow or deny a transaction using the communication device over a communications network.

III. STANDARDS OF REVIEW

A. Summary Judgment

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 415 U.S. 574, 586 n.10 (1986). A party asserting that a fact cannot be—or, alternatively, is—genuinely disputed must support the assertion either by citing to "particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for the purposes of the motions only), admissions, interrogatory answers, or other materials," or by "showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact." Fed. R. Civ. P. 56(c)(1)(A) & (B). If the moving party has carried its burden, the nonmovant must then "come forward with specific facts showing that there is a genuine issue for trial." *Matsushita*, 415 U.S. at 587 (internal quotation marks omitted). The court will "draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence." *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

To defeat a motion for summary judgment, the non-moving party must "do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita*, 475 U.S. at 586-87; *see also Podohnik v. U.S. Postal Service*, 409 F.3d 584, 594 (3d Cir. 2005) (stating party opposing summary judgment "must present more than just bare assertions, conclusory allegations or suspicions to show the existence of a genuine issue") (internal quotation marks omitted). Although the "mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment," a factual dispute is genuine where "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 411 U.S. 242, 247-48 (1986). "If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted." *Id.* at 249-50 (internal citations omitted); *see also Celotex Corp. v. Catrett*, 411 U.S. 317, 322 (1986) (stating entry of summary judgment is mandated "against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial").

B. Invalidity

The standard of proof to establish the invalidity of a patent is "clear and convincing evidence." *Golden Blount, Inc. v. Robert H. Peterson Co.*, 365 F.3d 1054, 1058 (Fed. Cir. 2004); *see also, Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1338-39 (Fed. Cir. 2013), vacated sub nom. *WildTangent, Inc. v. Ultramercial, LLC*, —— U.S. ——, 134 S.Ct. 2870 (2014). Whether a claim is drawn to patent-eligible subject matter under 35 U.S.C. § 101 is a threshold inquiry to be determined as a matter of law

in establishing the validity of the patent. *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1277 (Fed. Cir. 2013), *aff'd, Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, — U.S. —, 134 S.Ct. 2347 (2014); *In re Bilski*, 545 F.3d 943, 950 (Fed. Cir. 2008) (citing *In re Comiskey*, 499 F.3d 1365, 1371 (Fed. Cir. 2007)) ("*Bilski I*"). Section 101 provides that patentable subject matter extends to four broad categories, including: "new and useful process[es], machine[s], manufacture, or composition[s] of matter." 35 U.S.C. § 101; *see also Bilski v. Kappos*, 561 U.S. 593, 601 (2010) (" *Bilski II* "); *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). A "process" is statutorily defined as a "process, art or method, and includes a new use of a known process, machine manufacture, composition of matter, or material." 35 U.S.C. § 100(b). The Supreme Court has explained:

> A process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing. If new and useful, it is just as patentable as is a piece of machinery. In the language of the patent law, it is an art. The machinery pointed out as suitable to perform the process may or may not be new or patentable; whilst the process itself may be altogether new, and produce an entirely new result. The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence.

Diamond v. Diehr, 450 U.S. 175, 182–83 (1981) (internal quotations omitted).

The Supreme Court recognizes three "fundamental principle" exceptions to the Patent Act's subject matter eligibility requirements: "laws of nature, physical phenomena, and abstract ideas." *Bilski II*, 561 U.S. at 601. The Supreme Court has held that "[t]he concepts covered by these exceptions are 'part of the storehouse of

knowledge of all men ... free to all men and reserved exclusively to none.'" *Bilski II*, 561 U.S. at 602 (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)). "[T]he concern that drives this exclusionary principle is one of pre-emption," that is, "'that patent law not inhibit further discovery by improperly tying up the future use of' these building blocks of human ingenuity." *Alice,* 134 S.Ct. at 2354 (citing *Bilski II*, 561 U.S. at 611-12 and *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 566 U.S. —, 132 S.Ct. 1289, 1301 (2012)).

Although a fundamental principle cannot be patented, the Supreme Court has held that "an **application** of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection," so long as that application would not preempt substantially all uses of the fundamental principle. *Bilski II*, 561 U.S. at 612 (quoting *Diehr*, 450 U.S. at 187) (internal quotations omitted); *Bilski I*, 545 F.3d at 954. The Supreme Court recently reiterated the

> framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, "[w]hat else is there in the claims before us?" To answer that question, we consider 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. We have described step two of this analysis as a search for an "'inventive concept'"—i.e., an element or combination of elements that is "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself."

Alice Corp., 134 S.Ct. at 2355 (citing *Mayo*, 132 S.Ct. at 1294, 1296-98).[1] "[T]o

[1]The machine-or-transformation test still may provide a "useful clue" in the second step of the *Alice* framework. *Ultramercial, Inc. v. Hulu, LLC*, Civ. No. 2010–1544, 2014 WL 5904902, at *6 (Fed. Cir. November 14, 2014) (citing *Bilski II*,

transform an unpatentable law of nature into a patent-eligible **application** of such a law, one must do more than simply state the law of nature while adding the words 'apply it.'" *Mayo*, 132 S.Ct. at 1294 (citing *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972)). It is insufficient to add steps which "consist of well-understood, routine, conventional activity," if such steps, "when viewed as a whole, add nothing significant beyond the sum of their parts taken separately." *Id.* at 1298. "Purely 'conventional or obvious' '[pre]-solution activity' is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law." *Id.* (citations omitted). Also, the "prohibition against patenting abstract ideas 'cannot be circumvented by attempting to limit the use of the formula to a particular technological environment' or adding 'insignificant postsolution activity.'" *Bilski II*, 561 U.S. at 610-11 (citation omitted). For instance, the "mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 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.* (citations omitted).

Although decided before *Alice*, the court finds the comparison of *Bancorp Servs., LLC v. Sun Life Assurance Co. of Canada*, 687 F.3d 1266 (Fed. Cir. 2012), to *SiRF*

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561 U.S. at 604 and *Bancorp Servs., L.L.C., v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). A claimed process can be patent-eligible under § 101 if: "(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing." *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008) (en banc), *aff'd on other grounds*, *Bilski II*, 561 U.S. 593.

Tech., Inc. v. Int'l Trade Comm'n, 601 F.3d 1319 (Fed. Cir. 2010), instructive. In *Bancorp*, where the asserted patents disclosed "specific formulae for determining the values required to manage a stable value protected life insurance policy," the district court granted summary judgment of invalidity under § 101. *Bancorp*, 687 F.3d at 1270. Under the machine prong of the machine or transformation test, the district court found that "the specified computer components are no more than objects on which the claimed methods operate, and that the central processor is nothing more than a general purpose computer programmed in an unspecified manner." *Id.* at 1273. In affirming the district court's findings, the Federal Circuit explained that

> the use of a computer in an otherwise patent-ineligible process for no more than its most basic function - making calculations or computations - fails to circumvent the prohibition against patenting abstract ideas and mental processes. As we have explained, "[s]imply adding a 'computer aided' limitation to a claim covering an abstract concept, without more, is insufficient to render the claim patent eligible." *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012).
>
> 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 calculations or computations could not.

Id. at 1278. Ultimately, the Federal Circuit concluded that "[t]he computer required by some of Bancorp's claims is employed only for its most basic function, the performance of repetitive calculations, and as such does not impose meaningful limits on the scope of those claims." *Id.* at 1278.

In contrast to *Bancorp*, the Federal Circuit in *SiRF* found that a GPS receiver was "integral" to the claims at issue and, therefore, the machine or transformation test was satisfied. *SiRF*, 601 F.3d at 1332. As in *Bancorp*, the *SiRF* Court emphasized that a machine will only "impose a meaningful limit on the scope of a claim [when it plays] a

significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations." *Id.* at 1333. After noting how the GPS receiver was specifically involved in each step of the method, the Court concluded that "the use of [the] GPS receiver is essential to the operation of the claimed methods." *Id.*

In sum, although it is "clear that computer-based programming constitutes patentable subject matter so long as the basic requirements of [35 U.S.C.] § 101 are met," *AT&T*, 172 F.3d at 1360, the requirements of § 101 as applied to this area of technology have been a moving target, from the complete rejection of patentability for computer programs[2] referenced above to the much broader enunciation of the test in *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), *abrogated by In re Bilski*, 545 F.3d 943., that is, "a computer-implemented invention was considered patent-eligible so long as it produced a 'useful, concrete and tangible result.'" *DDR Holdings, LLC v. Hotels.Com, L.P.,* Civ. No. 2013–1505, 2014 WL 6845152, at *10 (Fed. Cir. Dec. 5, 2014). As instructed by the Federal Circuit in *DDR Holdings,* its most recent attempt to bring clarity to this area of the law: (1) "recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible," *id.* at *9; (2) "mathematical algorithms, including those executed on a generic computer, are abstract ideas," *id.*; (3) "some fundamental economic and

[2] *See, e.g.,* 33 Fed. Reg. 15581, 15609-10 (1968). Indeed, in his dissent in *Diamond v. Diehr*, 450 U.S. 175 (1981), Justice Stevens's solution was to declare all computer-based programming unpatentable. *Id.* at 219.

conventional business practices are also abstract ideas," *id.*; and (4) general use of the Internet "to perform an abstract business practice (with insignificant added activity)" does not pass muster under § 101, *id.* at *12. In order for claims addressing "Internet-centric challenges" to be patent eligible,[3] the claims must do more than

> recite a commonplace business method aimed at processing business information, applying a known business process to the particular technological environment of the Internet, or creating or altering contractual relations using generic computer functions and conventional network operations, such as the claims in *Alice, Ultramercial, buySAFE, Accenture,* and *Bancorp.*

Id. (citing *Alice,* 134 S.Ct. at 2359; *Ultramercial*, 2014 WL 5904902, at *5, *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344-45 (Fed. Cir. 2013); *Bancorp*, 687 F.3d at 1278).

IV. DISCUSSION

Defendant at bar contends that the asserted claims are directed to banking practices known and used for many years and now performed on a generic computer, in other words, an "abstract idea."[4] (D.I. 139 at 12-13) The specification describes that

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[3]Although the court understands that the advent of the Internet inspired countless inventive ways of accomplishing routine tasks better, faster, cheaper – indeed, both the PTO and the Federal Circuit considered such ingenuity sufficiently inventive under § 101 to be patent eligible – apparently such is not the case under the current legal reasoning.

[4]Plaintiff asserts that defendant has offered changing interpretations of the "abstract idea" over the course of the litigation and requests that the court strike such "abstract ideas." Defendant asserted in its affirmative defense that the subject matter of the '003 patent was not patent-eligible under § 101. (D.I. 6 at 6, ¶ 20) This defense, coupled with the explanation in defendant's initial invalidity contentions that plaintiff's patent follows the "natural progression of technology that occurred in the [19]80['s] and early [19]90's" (D.I. 195, ex. 10 at 13-15), provides notice of defendant's intent to

> [t]he present invention provides an apparatus and a method for providing financial transaction authorization, notification and/or security, and, in particular, provides an apparatus and a method for providing financial transaction authorization, notification and/or security in conjunction with credit card, charge card, debit card, and/or currency or "smart" card use, savings and/or checking account activity and use and/or cellular telephone use . . . .

(3:66-4:6) The asserted apparatus claims[5] describe "[a] transaction security apparatus." For example, claim 30 provides:

> A transaction security apparatus, comprising:
> a memory device, wherein the memory device stores a limitation or restriction regarding a banking transaction, wherein the banking transaction involves a withdrawal from a checking account or a cashing of a check on a checking account, wherein the limitation or restriction contains information for prohibiting a withdrawal from a checking account or for prohibiting a cashing of a check on a checking account, wherein the limitation or restriction is transmitted from a communication device associated with an individual account holder, and further wherein the limitation or restriction is transmitted to a receiver on or over at least one of the Internet and the World Wide Web, wherein the limitation or restriction is automatically received by the receiver, and further wherein the limitation or restriction is automatically stored in the memory device; and
> a processing device, wherein the processing device processes information regarding a banking transaction, wherein the processing device utilizes the limitation or restriction automatically stored in the memory device in processing the banking transaction, and further wherein the processing device generates a signal containing information for allowing or disallowing the banking transaction.

(47:19-43)

Applying the analytical framework of *Alice*, the court first "determine[s] whether the claims at issue are directed to one of those patent-ineligible concepts." In *Alice*, the

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proceed with an invalidity defense. A § 101 analysis is a matter of law and the court will not strike defendant's arguments in this regard. Plaintiff's motion to strike is denied.

[5]The asserted independent claims are 30, 102, 317, 414 and the asserted dependent claims are 31, 34, 106, 122, 324, 343, 416, and 422.

Supreme Court found that the claims were drawn to the patent-ineligible abstract idea of "intermediated settlement," which was also a "fundamental economic practice." *Id.* at 2356. In *Bilski II*, the Supreme Court held that the claims involved were drawn to the patent-ineligible abstract idea of "hedging, or protecting against risk," which was a "fundamental economic practice." *Id.* at 611. In each of these cases, the claims described more than the central idea put forth by the Supreme Court. For example, in *Bilski II*, claim 1 described "a series of steps instructing how to hedge risk." *Bilski II*, 561 U.S. at 599.

In this regard, defendant offers the following hypothetical: "Mr. Ashley, a bank teller, is sorting the checks presented that day for payment. An account holder, Ms. Samuels, asks (or has asked) Mr. Ashley to stop payment on her check No. 235 for $75.00. Mr. Ashley locates check 235 for $75.00 and does not pay it." (D.I. 139 at 14) The claim by claim comparison for claim 30 is:[6]

'003 Claim Language (all parentheticals are added to claim)	**Performance Without a Computer**
A transaction security apparatus, comprising:	
a memory device (computer memory), wherein the memory device stores	Mr. Ashley's memory or the bank's written list used for reference regarding holds or stop payment orders.
a limitation or restriction regarding a banking transaction, wherein the banking transaction involves a withdrawal from a checking account or a cashing of a check on a checking account, wherein the	Mr. Ashley has memorized, or recalls to review, the written list of accounts having a hold or stop payment order[] on checking accounts.

[6]Defendant provides similar comparisons for independent claims 102, 317, and 414. (D.I. 139 at 16-21)

limitation or restriction contains information for prohibiting a withdrawal from a checking account or for prohibiting a cashing of a check on a checking account,	
wherein the limitation or restriction is transmitted from a communication device (e.g., a personal computer) associated with an individual account holder, and further wherein the limitation or restriction is transmitted to a receiver (computer communications controller) on or over at least one of the Internet and the World Wide Web,	An account holder, Ms. Samuels, speaks to Mr. Ashley, or she gives him a note, or calls him, and asks that Mr. Ashley stop payment on Check No. 235 for $75.00 or that he put a hold order on her account.
wherein the limitation or restriction is automatically received by the receiver, and further wherein the limitation or restriction is automatically stored in the memory device;	Mr. Ashley hears Ms. Samuels request or he reads her note and he memorizes it or writes it onto the bank list of stop payment orders or account hold orders.
and a processing device, (computer CPU) wherein the processing device processes information regarding a banking transaction,	Mr. Ashley as he sorts that day's presented checks for cashing.
wherein the processing device utilizes the limitation or restriction automatically stored in the memory device in processing the banking transaction, and further	Mr. Ashley consults the list or remembers Ms. Samuels' stop payment order or hold order while sorting the presented checks for payment.
wherein the processing device generates a signal containing information for allowing or disallowing the banking transaction.	Mr. Ashley notices a check on Ms. Samuels' account that matches the stop payment order of Ms. Samuels and Mr. Ashley' decides he is not to pay the check.

(D.I. 139 at 14-16)

Plaintiff objects to defendant's characterization of claim 30 as incomplete, arguing that it is not directed to all bank transactions, nor is it limited to checks. Plaintiff

also protests that the hypothetical ignores what may be the most important element of these claims – that the "limitation or restriction" comes from the "communications device associated with an individual account holder" – in other words, that the claim is performed by computers. But that is precisely what defendant seeks to demonstrate, that the abstract idea embodied by the claim is a conventional business practice utilized by bankers or financial institutions in their dealings with individual account holders without the use of computers. Consistent with the analyses in *Alice* and *DDR Holdings*, the claims at issue are directed to an abstract idea.

Turning to step two of the *Alice* framework, the court examines whether the claims are limited by an "inventive concept" such that "the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice Corp.*, 134 S.Ct. at 2355. To this end, plaintiff argues that the claims use "specific computers" with bank processing software, making them "special purpose computers." Defendant maintains that the claims use generic computer components. The bank processing software is described in the specification.

> The central processing computer 103 will then, at step 133, process the information and/or data pertinent to the transaction and to the particular account. The central processing computer 103 may utilize any of the **widely known data processing and/or software routines**, which are known to those skilled in that art, in order to process transaction requests and/or authorizations involving the use of the respective account(s) and/or related card(s).

(25:17-24)

Plaintiff admits that the applicant did not invent the computer components or the banking software. For example, claim 30 utilizes a memory to store a limitation or restriction, a communication device to transmit, a receiver to receive, and a processing

device to process information and generate a signal containing information. While plaintiff objects to the characterization of these components as generic, the addition of well known data processing software does not transform these components into a "special purpose computer." Plaintiff's expert, Cheng, stated that

> none of the asserted claims require only a conventional processing device and a memory device. Every asserted claim requires significantly more, including in some claims receivers, transmitters, communications devices (in some claims very specific communications devices), data entry devices, input devices, network computers, central transaction processing computers, the Internet and World Wide Web . . . .

(D.I. 144, ex. 22 at ¶ 49) This conclusory statement, however, does not provide any examples of any of the components performing functions other than traditional computing functions such as storing, processing, and transmitting. *Cf. In re Katz*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (in analyzing means-plus-function claims, finding that "the functions of 'processing,' 'receiving,' and 'storing' are coextensive with the structure disclosed, i.e., a general purpose processor," such "functions can be achieved by any general purpose computer without special programming"). The computer components are being employed for basic functions, including storage, transmitting and receiving information, and, the court concludes that such components are not "specific" or "special purpose" computers.[7] While the computer components do allow the abstract idea to be performed more quickly, this does not impose a meaningful limit on the scope of the claim. *Bancorp*, 687 F.3d at 1278.

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[7]Plaintiff advances the same argument, i.e., that the claims use "special purpose computers," to assert that the claims are "tied to a particular machine or apparatus," and satisfy the first prong of the machine-or-transformation test. Using the same analysis, the court disagrees.

As the Federal Circuit explained in *DDR Holdings*, in order to pass muster under § 101, it is no longer sufficient to use the Internet through generic computer components to achieve a useful result. The "inventive concept" required under the second step of the *Alice* test must now "specify how interactions with the Internet are manipulated to yield a desired result . . . ." *DDR Holdings,* 2014 WL 6845152 at *12. The claims in *DDR Holdings*, for example, stood apart "because they [did] not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution [was] necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *Id.* at *10. The claims at issue fall squarely within the former category of patent ineligible claims.

The fact that the asserted claims are apparatus claims, not method claims, does not change the court's analysis. Indeed, if that were the case, then "applying a presumptively different approach to system [or apparatus] claims generally would reward precisely the type of clever claim drafting that the Supreme Court has repeatedly instructed [the Court] to ignore." *CLS Bank*, 717 F.3d at 1289; *Mayo*, 132 S.Ct. at 1297; *see also, Walker Digital*, 2014 WL 4365245 at *6 (finding both the system and method claims invalid, when "the system claims recited . . . merely take the abstract idea of [the method] claims . . . and list generic computer components (processor, memory) to implement the abstract idea."). Here, as in *Bancorp*, "without the computer limitations nothing remains in the claims but the abstract idea." *Bancorp*, 687 F.3d 1266 at 1279-80.

The preemption inquiry[8] also persuades the court that the claims at issue are not patent eligible. In this regard, plaintiff argues that the field is not preempted because a bank could communicate with its customers without using the Internet, i.e., via mail, telephone, or in person. Moreover, plaintiff explains that "the claimed limitations or restrictions [could] be entered by bank employees, rather than coming from an account holder's communications device." (D.I. 143 at 26) In other words, plaintiff argues that there is no preemption as the abstract idea can be performed without computers. However, this argument turns the analysis on its head. With the ubiquity of computers, arguing that a field is not preempted because a claim may be performed "by hand" is not persuasive. "[T]he prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." *Alice*, 134 S.Ct. at 2358 (citations omitted). Allowing the asserted claims to survive would tie up any innovation related to performing banking transactions on computers which would, in turn, monopolize the "abstract idea." The above analysis applies to each of the independent claims.

Dependent claims 31 and 106 add a transmitter to send a second signal to a

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[8]The preemption inquiry focuses on whether the patent "would risk disproportionately tying up the use of the underlying ideas." *Alice*, 134 S.Ct. at 2354; *Mayo*, 132 S.Ct. at 1294 (holding that "patents [that] would ... disproportionately t[ie] up the use of the underlying natural laws" are invalid for lacking patentable subject matter); *Enfish, LLC v. Microsoft Corp.*, Civ. No. 12–07360, 2014 WL 5661456, at *5 (C.D. Cal. Nov. 3, 2014) (the court "must then determine whether there is an inventive concept that appropriately limits the claim, such that the claim does not preempt a significant amount of inventive activity.").

communication device with information regarding the banking transaction. Claim 34 adds a transmitter which transmits an email message with information to a network computer and/or communication devices. Claim 324 requires an Internet transaction. Claims 343 and 416 require the communication device to be a wireless device. The above analysis addressed the "transmitter," "email messages," and the use of the Internet. These are each activities which are made possible by generic computers. The restriction to wireless devices does not purposefully limit the claims. Claim 122 describes a certain limitation or restriction type. This limitation does not restrict the claim, instead, it provides a list of common transaction limitations, i.e., limiting the dollar amount of a transaction or authorizing specific vendors. Claim 422 requires that the processing device evaluate a hold and prohibit a withdrawal for a checking account, a savings account, or an automated teller machine account. This claim language describes a specific use of the processing device, thereby describing a particular application of the "abstract idea" discussed above. None of the dependent limitations serve to limit the claims in such a way that the "abstract idea" is meaningfully limited. The court concludes that the asserted claims do not recite patent eligible subject matter and, therefore, are invalid under § 101.

V. CONCLUSION

For the foregoing reasons, the court grants defendant's motion for summary judgment of invalidity and denies plaintiff's motion for summary judgment of validity with

regard to patentable subject matter.[9,10]

[9]The court does not reach the parties' other arguments regarding validity. Nor does the court reach the parties' remaining motions to strike certain arguments and testimony regarding infringement.

[10]The claims are invalid and, therefore, not infringed. *Exergen Corp. v. Wal–Mart Stores, Inc.*, 575 F.3d 1312, 1320 (Fed. Cir. 2009) ("invalid claim[s] cannot give rise to liability for infringement") (citation omitted). For this reason, the court grants defendant's motion for summary judgment of non-infringement and denies plaintiff's motion for summary judgment of infringement.

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

JOAO BOCK TRANSACTION SYSTEMS, LLC, Plaintiff, v. JACK HENRY & ASSOCIATES, INC., Defendant.	)	Civ. No. 12-1138-SLR

ORDER

At Wilmington this 15th day of December 2014, consistent with the memorandum opinion issued this same date;

IT IS ORDERED that:

1. Defendant's motion for summary judgment of invalidity (D.I. 138) is granted.

2. Plaintiff's motion for summary judgment of validity (D.I. 142) is denied.

3. Defendant's motion for summary judgment of non-infringement (D.I. 146) is granted.

4. Plaintiff's motion for summary judgment of infringement (D.I. 149) is denied.

5. Plaintiff's motion to strike defendant's motion for summary judgment of

invalidity (D.I. 157) is denied.

6. Plaintiff's motion to strike portions of defendant's motion for summary judgment of non-infringement and portions of defendant's opposition to plaintiff's motion for summary judgment of infringement (D.I. 196) is denied as moot.

7. Defendant's motion to strike new infringement theories and product functionality (D.I. 152) is denied as moot.

8. Defendant's motion to strike portions of the expert infringement report of Alex Cheng (D.I. 181) is denied as moot.

United States District Judge

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

JOAO BOCK TRANSACTION SYSTEMS, LLC,	)	
Plaintiff,	)	
v.	)	Civ. No. 12-1138-SLR
JACK HENRY & ASSOCIATES, INC.,	)	
Defendant.	)	

JUDGMENT IN A CIVIL CASE

For reasons stated in the court's memorandum opinion and order of December 15, 2014;

IT IS ORDERED AND ADJUDGED that judgment be and is hereby entered in favor of defendant Jack Henry & Associates and against plaintiff Joao Bock Transaction Systems, LLC.

United States District Judge

Dated: 12/18/2014

(By) Deputy Clerk

CERTIFICATE OF SERVICE

I hereby certify that on March 18, 2015, on behalf of Plaintiff-Appellant JOAO BOCK TRANSACTION SYSTEMS, LLC, I caused to be filed with the Clerk of the United States Court of Appeals for the Federal Circuit via the Court's CM/ECF system, which caused to be served by on all counsel of record, a copy of the JOAO BOCK TRANSACTION SYSTEMS, LLC'S OPENING APPELLATE BRIEF [CORRECTED].

In addition, I served by electronic mail a copy on counsel as indicated below.

Dated: March 18, 2015

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B) or Federal Rule of Appellate Procedure 28.1(e) because it contains 13982 words, excluding parts of the brief exempted by Federal Rule of Appellate Procedure 32(a)(7)(B)(iii).

2. This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) or Federal Rule of Appellate Procedure 28.1(e) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6), because it has been prepared in a proportionally spaced typeface using Microsoft Word 2010 in Times New Roman 14 point font.

DATED: March 18, 2015

Respectfully submitted,
HENINGER GARRISON DAVIS, LLC

/s/ Joseph J. Gleason
Joseph J. Gleason
Attorneys for Plaintiff-Appellant, Joao Bock Transaction Systems, LLC