# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

MAZ ENCRYPTION TECHNOLOGIES LLC,	:
Plaintiff,	
V.	C.A. No. 13-304-LPS
BLACKBERRY CORPORATION,	
Defendant.	· :

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# **MEMORANDUM OPINION**

September 29, 2016 Wilmington, Delaware

STARK, U.S. District Judge:

Pending before the Court is Defendant Blackberry Corporation's ("Defendant" or "Blackberry") Motion for Judgment on the Pleadings filed pursuant to Federal Rule of Civil Procedure 12(c). (D.I. 75) ("Motion") Blackberry contends that claims 31-38 of U.S. Patent No. 6,185,681 ("'681 patent")<sup>1</sup> are directed to patent-ineligible subject matter and are therefore invalid under 35 U.S.C. § 101. For the reasons below, the Court will deny Defendant's Motion.

## I. BACKGROUND

MAZ Encryption Technologies LLC ("Plaintiff" or "MAZ") sued Blackberry on February 22, 2013, alleging infringement of the '681 patent. (D.I. 1) The '681 patent is entitled "Method of Transparent Encryption and Decryption for an Electronic Document Management System" and relates to transparently integrating encryption and decryption functionality into an electronic document management system ("EDMS"). ('681 patent at Abstract) The PTO conducted an *ex parte* reexamination of the patent, which resulted in cancellation of original claims 1-30 and addition of claims 31-38. (D.I. 1-1 Ex. A, Ex Parte Reexamination Certificate ("Reexamination Certificate"))<sup>2</sup> Plaintiff asserts all eight of claims 31-38 against Defendant. (D.I. 76 at 9)

The parties completed briefing on Defendant's Motion on May 27, 2015. (D.I. 76, 83, 87) The Court issued a Memorandum Opinion on claim construction on June 30, 2015. (D.I. 93)<sup>3</sup> The Court heard oral argument on Defendant's Motion on December 15, 2015. (D.I. 143

<sup>&</sup>lt;sup>1</sup>The '681 patent is in the record at D.I. 1-1 Ex. A.

<sup>&</sup>lt;sup>2</sup>Claims 31-38 are found in the Reexamination Certificate, which is appended to the end of the original '681 patent.

<sup>&</sup>lt;sup>3</sup>To the extent necessary, the Court will apply its claim constructions in deciding Defendant's Motion.

("2015 Tr."))

The parties filed *Daubert* and summary judgment motions on April 22, 2016. (D.I. 155, 157, 159, 161, 164) Prior to a hearing on the parties' *Daubert* and summary judgment motions, the Court ordered the parties to submit supplemental briefing on Defendant's § 101 Motion in light of recent decisions by the Court of Appeals for the Federal Circuit addressing § 101. (D.I. 208) The parties completed supplemental briefing on Defendant's Motion on July 22, 2016. (D.I. 209, 210, 211, 212, 213, 214) The Court heard oral argument on the parties' *Daubert* and summary judgment motions and on the recent § 101 cases on August 17, 2016. (D.I. 219 ("2016 Tr."))<sup>4</sup>

#### II. LEGAL STANDARDS

## A. Motion for Judgment on the Pleadings

Pursuant to Federal Rule of Civil Procedure 12(c), a party may move for judgment on the pleadings "[a]fter pleadings are closed – but early enough not to delay trial." When evaluating a motion for judgment on the pleadings, the Court must accept all factual allegations in a complaint as true and view them in the light most favorable to the non-moving party. *See Rosenau v. Unifund Corp.*, 539 F.3d 218, 221 (3d Cir. 2008); *see also Maio v. Aetna, Inc.*, 221 F.3d 472, 482 (3d Cir. 2000). This is the same standard that applies to a Rule 12(b)(6) motion to dismiss. *See Turbe v. Gov't of Virgin Islands*, 938 F.2d 427, 428 (3d Cir. 1991).

A Rule 12(c) motion will not be granted "unless the movant clearly establishes that no material issue of fact remains to be resolved and that he is entitled to judgment as a matter of



<sup>&</sup>lt;sup>4</sup>Plaintiff submitted an additional notice of supplemental authority on September 15, 2016. (D.I. 226)

law." *Rosenau*, 539 F.3d at 221. "The purpose of judgment on the pleadings is to dispose of claims where the material facts are undisputed and judgment can be entered on the competing pleadings and exhibits thereto, and documents incorporated by reference." *Venetec Int'l. Inc. v. Nexus Med., LLC*, 541 F.Supp.2d 612, 617 (D. Del. 2008); *see also In re Burlington Coat Factory Sec. Litig.*, 114 F.3d 1410, 1426 (3d Cir. 1997) (explaining that any documents integral to pleadings may be considered in connection with Rule 12(c) motion). "The issue is not whether a plaintiff will ultimately prevail but whether the claimant is entitled to offer evidence to support the claims." *Burlington Coat Factory*, 114 F.3d at 1420. Thus, a court may grant a motion for judgment on the pleadings (like a motion to dismiss) only if, after "accepting all well-pleaded allegations in the complaint as true, and viewing them in the light most favorable to plaintiff, plaintiff is not entitled to relief." *Maio*, 221 F.3d at 482 (3d Cir. 2000).

The Court may consider matters of public record as well as authentic documents upon which the complaint is based if attached to the complaint or as an exhibit to the motion. *See Oshiver v. Levin, Fishbein, Sedran & Berman*, 38 F.3d 1380, 1384 n.2 (3d Cir. 1994). The Court may also take judicial notice of the factual record of a prior proceeding. *See Oneida Motor Freight, Inc. v. United Jersey Bank*, 848 F.2d 414, 416 n.3 (3d Cir. 1988). Ultimately, a motion for judgment on the pleadings can be granted "only if no relief could be afforded under any set of facts that could be proved." *Turbe*, 938 F.2d at 428.

## B. Patent-Eligible Subject Matter

Under 35 U.S.C. § 101, "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." There are three exceptions to § 101's broad patent-eligibility principles: "laws of nature, physical phenomena, and abstract ideas." *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980). Pertinent here is the third category, "abstract ideas," which "embodies the longstanding rule that an idea of itself is not patentable." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014) (internal quotation marks omitted). "As early as *Le Roy v. Tatham*, 55 U.S. 156, 175 (1852), the Supreme Court explained that '[a] principle, in the abstract. is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.' Since then, the unpatentable nature of abstract ideas has repeatedly been confirmed." *In re Comiskey*, 554 F.3d 967, 977-78 (Fed. Cir. 2009).

In *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012), the Supreme Court set out a two-step "framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 134 S. Ct. at 2355. First, courts must determine if the claims at issue are directed to a patent-ineligible concept – in this case, an abstract idea ("step 1"). *See id.* If so, the next step is to look 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" ("step 2"). *Id.* The two steps are "plainly related" and "involve overlapping scrutiny of the content of the claims." *Elec. Power Grp., LLC v. Alstom S.A.*, 2016 WL 4073318, at \*3 (Fed. Cir. Aug. 1, 2016).

### 1. Mayo Step 1

At step 1, "the claims are considered in their entirety to ascertain whether their character *as a whole* is directed to excluded subject matter." *Internet Patents Corp. v. Active Network,* 

Inc., 790 F.3d 1343, 1346 (Fed. Cir. 2015) (emphasis added); see also Affinity Labs of Texas, LLC v. DIRECTV, LLC, 2016 WL 5335501, at \*3 (Fed. Cir. Sept. 23, 2016) ("The 'abstract idea' step of the inquiry calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter."). Claims implemented purely in software are not necessarily directed to patent-ineligible abstract ideas under step 1. See Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016) ("Software can make non-abstract improvements to computer technology just as hardware improvements can ...."); id. ("We thus see no reason to conclude that all claims directed to improvements in computer-related technology, including those directed to software, are abstract and necessarily analyzed at the second step of *Alice*, nor do we believe that *Alice* so directs."); see also id. at 1338 ("[W]e are not persuaded that the invention's ability to run on a generalpurpose computer dooms the claims."); id. at 1339 ("Much of the advancement made in computer technology consists of improvements to software that, by their very nature, may not be defined by particular physical features but rather by *logical structures and processes*.") (emphasis added).

At step 1, the Federal Circuit has distinguished claims that are "directed to *an improvement to computer functionality* versus being directed to an abstract idea." *Id.* at 1335 (emphasis added). *Enfish*, for example, found claims to be not abstract because the "plain focus of the claims is on an improvement to computer functionality itself," distinguishing such patent claims from those involved in *Alice*, which involved "economic or other tasks for which a computer is used in its ordinary capacity." *Id.* at 1336. By contrast, in *Alstom*, the Federal Circuit determined that certain claims *were* directed to an abstract idea because "the focus of the claims is not on . . . an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools." 2016 WL 4073318, at \*4. *Enfish* adds that a patent specification's disparagement of prior art or "conventional" implementations may bolster a conclusion that claims are directed to a non-abstract improvement of technology rather than an abstract idea. 822 F.3d at 1337, 1339.

Courts should not "oversimplif[y]" key inventive concepts or "downplay" an invention's benefits in conducting a step-1 analysis. *See id.* at 1337; *see also McRO, Inc. v. Bandai Namco Games Am. Inc.*, 2016 WL 4896481, at \*7 (Fed. Cir. Sept. 13, 2016) ("[C]ourts 'must be careful to avoid oversimplifying the claims' by looking at them generally and failing to account for the specific requirements of the claims.") (quoting *In re TLI Commc 'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016)). "Whether at step one or step two of the *Alice* test, in determining the patentability of a method, a court must look to the claims as an ordered combination, without ignoring the requirements of the individual steps." *McRO*, 2016 WL 4896481, at \*7.

## 2. Mayo Step 2

At step 2, the Federal Circuit has instructed courts to "look to both the claim as a whole and the individual claim elements to determine whether the claims contain 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." *McRO*, 2016 WL 4896481, a \*7 (internal brackets and quotation marks omitted). The "standard" step-2 inquiry includes consideration of whether claim elements "simply recite 'well-understood, routine, conventional activit[ies]." *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (quoting *Alice*, 134 S. Ct. at 2359). "Simply appending conventional steps, specified at a high level of generality, [is] not *enough* to supply an inventive concept." *Alice*, 134 S. Ct. at 2357 (emphasis in original; internal quotation marks omitted).

However, "[t]he inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art." *Bascom*, 827 F.3d at 1350. In *Bascom*, the Federal Circuit held that "the limitations of the claims, taken individually, recite generic computer, network and Internet components, none of which is inventive by itself," but nonetheless determined that an *ordered combination* of these limitations was patent-eligible under step 2. *Id.* at 1349. The Federal Circuit has looked to the claims as well as the specification in performing the "inventive concept" inquiry. *See Affinity Labs*, 2016 WL 5335502, at \*5 ("[N]either the claim nor the specification reveals any concrete way of employing a customized user interface.").

The "mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention" under step 2. *Alice*, 134 S. Ct. at 2358. "Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of additional feature that provides any practical assurance that the process is more than a drafting effort designed to monopolize the abstract idea itself." *Id*.

#### 3. **Preemption**

The Supreme Court has instructed that, "in applying the § 101 exception, [courts] must distinguish between patents that claim the building blocks of human ingenuity and those that integrate the building blocks into something more, thereby transforming them into a patent-eligible invention." *Alice*, 134 S. Ct. at 2354 (internal citation and quotation marks omitted). The "concern that drives the exclusionary principle [i]s one of pre-emption." *Id.* That is, where a patent would preempt use of "basic tools of scientific and technological work," *i.e.*, "[1]aws of

nature, natural phenomena, and abstract ideas," the patent would "impede innovation more than it would tend to promote it, thereby thwarting the primary object of the patent laws." *Id.* (internal quotation marks omitted).

The Federal Circuit has considered the issue of preemption at both steps 1 and 2. For example, in *McRO*, 2016 WL 4896481, at \*9, in support of its conclusion that a claim was patent-eligible under step 1, the Federal Circuit held that limitations of a claim "prevent[ed] preemption of all processes for achieving automated lip-synchronization of 3-D characters." In *Bascom*, 2016 WL 3514158, at \*7, in support of the Court's conclusion that claims reciting "a specific, discrete implementation of the abstract idea of filtering content" were patent-eligible under step 2, the Federal Circuit explained that the claims did not preempt "all ways of filtering content on the Internet."

## III. DISCUSSION

## A. Burden of Proof

The parties dispute which burden of proof applies in deciding questions of patent eligibility under § 101. Plaintiff cites a vacated Federal Circuit opinion in support of its position that a clear and convincing standard should apply. (D.I. 83 at 8) (citing *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1342 (Fed. Cir. 2013), cert. granted, judgment vacated sub nom. *WildTangent, Inc. v. Ultramercial, LLC*, 134 S. Ct. 2870 (2014) ("[A]ny attack on an issued patent based on a challenge to the eligibility of the subject matter must be proven by clear and convincing evidence.")) Defendant argues that the clear and convincing standard should not apply, because patent eligibility is a question of law, "subject to a lesser evidentiary burden." (D.I. 87 at 1) (citing *In re Bilski*, 545 F.3d 943, 951 (Fed. Cir. 2008)) Patent eligibility is a question of law. See Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.,

827 F.3d 1042, 1047 (Fed. Cir. 2016). Whatever evidentiary standard should be applied would only apply to subsidiary "questions of fact and not to questions of law." *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 114 (2011) (Breyer, J., concurring).

Here the parties agree that there are no disputed questions of fact relevant to Defendant's Motion. (2015 Tr. 3, 36) Thus, the Court's decision is made purely as a matter of law and does not turn on questions of fact, obviating the need for the Court to choose a particular standard of proof. *See Rosenau*, 539 F.3d at 221.

## B. Patent-Eligible Subject Matter

The parties agree that claim 31 is representative of all claims of the '681 patent for purposes of the Court's § 101 analysis. (2015 Tr. 10, 36) Claim 31 recites:

A method of encrypting an electronic document which is open in an application program running in a general purpose computer, the general purpose computer including a display, a user input device, a crypto module and a processor, the method comprising:

providing plural documents having respective names

providing a first table having

the names of encrypted documents

for each of the names of encrypted documents in the first table, key names associated with the encryption key values for the encrypted documents

(a) from within the application program running in the general purpose computer, a user issuing one of a "close," "save" or "save as" command for the document using the user input device;



(b) automatically translating the command into an event;

(c) the crypto module automatically trapping the event;

(d) the crypto module determining if the document should be encrypted using the first table, and if so then automatically obtaining an encryption key value by retrieving a key name associated with a name of the selected document from the first table and retrieving the encryption key value associated with the key name from a second table, the second table having at least one encryption key value and at least one key name respectively associated with one of the encryption key values

(e) the crypto module automatically encrypting the document using the encryption key value;

(f) the crypto module automatically passing control to an electronic document management system; and

(g) the electronic document management system executing the issued "close," "save" or "save as" command; whereby the electronic document is automatically encrypted.

(Reexamination Certificate at 1:21-58)

### 1. Mayo Step 1

Step 1 requires the Court to consider whether the claims are directed to a patent-ineligible abstract idea. Viewed as a whole, claim 31 describes a process that enables frictionless, "behindthe-scenes" encryption – when a user closes or saves a file, the invention automatically obtains an appropriate encryption key, encrypts the file, and saves the encrypted file in an EDMS. According to the specification of the '681 patent, the claimed invention is a *technical solution* to problems in the prior art. For example, the specification describes incompatibility of "typical EDMSes" with "typical encryption systems" in the prior art. '681 patent at 4:6-8. The specification also describes "[t]ypical encryption systems" in the prior art as "very cumbersome" because "[t]hey require a user to interrupt their normal work flow, save their clear text document, activate the separate encryption software, and save the cipher text document under a different name." (*Id.* at 3:56-60) The method disclosed in claim 31 purports to solve these problems. Here, then, as in *Enfish*, "the plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity." 822 F.3d at 1335.

Defendant argues that claim 31 is directed to conventional elements that are "combined in the same manner as in the prior art." (*See, e.g.*, D.I. 211 at 3) This argument raises a fundamental problem with Defendant's choice to bring its § 101 challenge under Rule 12(c). As noted above, the parties agree that there are no disputed issues of fact relevant to Defendant's Motion and, therefore, have not "presented" evidence "outside the pleadings" that might trigger Rule 12(d)'s requirement that the Court treat Defendant's Motion as a motion for summary judgment under Rule 56. Fed. R. Civ. P. 12(d). Defendant could have filed a motion for summary judgment instead of a motion under Rule 12,<sup>5</sup> and then could have relied on extrinsic evidence to rebut the '681 patent's characterization of its disclosed invention as a technical solution to a problem in the prior art. However, on the record properly before the Court on Defendant's Motion – which is a motion for judgment on the pleadings – the Court must take the specification's statements about the purported invention to be true. The Court is not free to accept Defendant's contrary attorney argument that claim 31 is directed to a "conventional" way

<sup>&</sup>lt;sup>5</sup>Defendant could have waited to press its § 101 issue until the time for case-dispositive motions or sought leave to file an early case-dispositive motion.

of transparent encryption.<sup>6</sup> (See D.I. 211 at 3)

Viewed in light of the patent's specification, and the current record before the Court, claim 31 is *not* directed to "basic tools of scientific and technological work" as described by the Supreme Court. *Alice*, 134 S. Ct. at 2354. For example, the invention disclosed in the '681 patent is distinguishable from the claimed inventions held to be patent-ineligible in *Alice* and *Bilski. See Alice*, 134 S. Ct. at 2355-56 (discussing *Bilski v. Kappos*, 561 U.S. 593, 599 (2010)). The Supreme Court observed that the claimed inventions in *Alice* and *Bilski* covered concepts that had been "long prevalent in our system of commerce." *Alice*, 134 S. Ct. at 2356 (quoting *Bilski*, 561 U.S. at 611). Defendant does not point to any part of the '681 patent or the pleadings (or the larger record) that would indicate that the invention of claim 31 covers any concept that was "long prevalent."

The patent's specification describes problems associated with "typical" prior art encryption systems, such as incompatibility with EDMS systems and general difficulty of use. (*See* '681 patent at 3:54-4:9) The '681 patent purports to solve these problems using a method that the PTO determined was non-obvious over references considered during the *ex parte* reexamination of the patent. (*See* D.I. 77 Ex. 5 at 13-14) For example, claim 31 recites use of two tables, one for pairing documents with key names and one for pairing key names with key values. Separation of the two pairings has functional significance, as explained in the specification. The specification further explains that a "smart card 265 preferably is used to keep the encryption and decryption keys *separate* from the workstation 150" for security purposes.

<sup>&</sup>lt;sup>6</sup>Furthermore, the extrinsic evidence largely supports Plaintiff's position, given that Plaintiff, but not Defendant, submitted expert testimony addressing Defendant's Motion, as discussed below.

('681 patent at 8:13-16) (emphasis added) In this preferred embodiment, the user enters a "user ID and password" to authenticate and access the "key information" stored on a smart card. (*Id.* at 8:28-31) The key information is preferably "related to the identity of the user." (*Id.* at 9:28-32) In sum, the use of two separate tables is a technological improvement to security accomplished by separating and securing encryption keys (onto, for example, a smart card) in the overall method of transparent encryption in an EDMS.<sup>7</sup>

Defendant proposes at least five different articulations of the abstract idea to which, in Defendant's view, claim 31 is directed: (1) "storing and accessing keys used to encrypt/decrypt documents," (2) "organizing and storing information safely," (3) "us[ing] computer technology to ... stor[e] and access[] keys," (4) "data manipulation," and (5) "storing and accessing data (filenames and encryption keys) in a logical tabular format." (D.I. 76 at 5, 16-17) Plaintiff argues that "Defendant's inability to identify a single abstract idea to which the '681 Patent is directed demonstrates the impropriety of its allegations." (D.I. 83 at 10) In response, Defendant argues that it was merely describing the same abstract idea in several different ways. (D.I. 87 at 6-7) ("The supposed 'five abstract ideas' ... are simply five different ways of expressing the same abstract idea of 'organizing and storing information safely."")

Regardless of whether Defendant's five articulations are viewed as different or the same, they each run afoul of the Federal Circuit's guidance in *Enfish* that courts should not "oversimplif[y]" key inventive concepts or "downplay" an invention's benefits in conducting a



<sup>&</sup>lt;sup>7</sup>In assessing patent eligibility, the Federal Circuit has considered "details contained in the specification," even though it may be improper (in connection with claim construction) to import such details into associated claim language. *See Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 2016 WL 5335501, at \*4 (Fed. Cir. Sept. 23, 2016).

step-1 analysis. 822 F.3d at 1337; *see also McRO*, 2016 WL 4896481, at \*7. "Whether at step one or step two of the *Alice* test, in determining the patentability of a method, a court must look to the claims as an ordered combination, *without ignoring the requirements of the individual steps*." *McRO*, 2016 WL 4896481, at \*7 (emphasis added).

Significant "individual steps" in claim 31 were added during reexamination, including the above-described use of tabular association of documents with "key names" and "key names" with "key values." (See D.I. 77 at 13-14) (summarizing exchange between applicant and examiner regarding "key name <--> document association" limitation added to overcome obviousness rejection) These limitations were added to distinguish the claimed invention from the "keydirectory association" found in the prior art and are evidence that claim 31 is "directed to a specific improvement to the way computers operate" rather than an abstract idea. *Enfish*, 822 F.3d at 1336. Defendant's broad articulations of abstract ideas do not capture what claim 31 is "directed to" because they do not take into account the *two separate* tables used to distinguish claim 31 over the prior art. Although not every difference between a purported invention and the prior art is necessarily relevant under a § 101 analysis, here it is plain from the reexamination prosecution history (with support in the specification) that the two-table limitations added during reexamination are sufficiently important that they must be included in any accurate description of the nature of claim 31 as a whole. See Affinity Labs, 2016 WL 5335501, at \*3 ("The 'abstract idea' steps of the inquiry calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter.").

Defendant tacitly acknowledges the significance of the two-table limitations in arguing that, "[w]hen stripped away of all the concepts that previously existed in the prior art, the only

novel concepts identified by the patentee are (1) key name – file association in the first table and (2) key name – key value association in the second table." (D.I. 76 at 15) Defendant states that "[t]hese are quintessentially abstract concepts." (*Id.*) Defendant's approach of "stripping away" concepts alleged to be in the prior art to expose only the "novel concepts," completely shorn of their surrounding context, was expressly rejected in *McRO*. "[A] court must look to the claims as an ordered combination, without ignoring the requirements of the individual steps." *McRO*, 2016 WL 4896481, at \*7. Viewed as an ordered combination, claim 31 recites a specific implementation of transparent encryption, not a computer implementation of an abstract idea.

Defendant argues that the claimed invention is patent ineligible because "each step in the asserted claims could be analogously performed by a human, rather than a computer." (D.I. 76 at 15) Defendant postulates that "the storage and utilization of filenames, key names, and key values recited in the patent claims is no different substantively than how an old hotel would store and keep track of the keys to its patrons' rooms." (D.I. 76 at 15) Defendant continues:

Upon entering the hotel, the guest would give her name to the clerk at the front desk. The clerk would consult a ledger, which identifies guests' names and their respective room number assignments. This ledger is the "first table." The clerk would then retrieve the proper room key from a board on the wall with a separate peg for each room key. All the keys on the board are arranged according to room number. This board is the "second table." In this configuration, the hotel guest is equivalent to the document or the data to be protected as recited in the patent, and the guest's name is the equivalent to the filename. The room key is the encryption key value. The room number, which corresponds to both the location of the key and the hotel guest's room, is equivalent to the key name. The ledger (first table) has the name of the person (document name or file name) and the room number (key name). The peg board (second table) stores the key name (room number) and the key to the room (encryption key).



(D.I. 76 at 15-16) Defendant's analogy is unpersuasive. It fails to capture the key inventive aspect touted in the '681 patent: handling encryption operations *without requiring user input*, that is, "transparently." ('681 patent at 7:58-62)<sup>8</sup> In Defendant's analogy, the hotel clerk manually performs each operation.

Moreover, encryption is a relatively sophisticated, computer-implemented method of protecting data, unlike the simple, human-executable method described in Defendant's analogy. As described in the '681 patent's specification, "Encryption is a process of scrambling data utilizing a mathematical function called an encryption algorithm, and a key that affects the results of this mathematical function... With most encryption algorithms, it is nearly impossible to convert cipher text back to clear text without knowledge of the encryption key used." ('681 patent at 3:17-24)

In addition, the entire exercise of comparing the invention in claim 31 to a humanexecutable series of steps is relatively unhelpful in this particular case, because the specification of the '681 patent so clearly identifies the claimed invention as "improv[ing] an existing *technological* process." *Alice*, 134 S. Ct. at 2358. Specifically, claim 31 is directed to a *specific* way of transparently encrypting data without the need for user input, eliminating interruption and inefficiency – as well as human action – in a technology process. Hence, claim 31 is distinguishable from claims that have been found to have human-executable analogues. *Compare Intellectual Ventures I LLC v. Symantec Corp.*, 100 F. Supp. 3d 371, 385 (D. Del.



<sup>&</sup>lt;sup>8</sup>It is undisputed that the claims are directed to "transparently" encrypting and decrypting data. (*See, e.g.*, D.I. 93 at 5 (claim construction opinion noting "parties agree that the crypto module 'transparently handles the encryption of documents and the decryption of encrypted documents"); 2015 Tr. at 5-6 (defense counsel))

2015) (holding that claim directed to "receiving identifying information, comparing it to other information, and outputting an indication based on the identifying information" was directed to abstract idea because it purported to solve problem that was "not necessarily rooted in computer technology"), *with id.* at 403-04 (holding that claim directed to "detecting a computer virus in installed data . . . in a telephone network" was not directed to abstract idea because underlying concept did not "make sense outside of a computer context").

Finally, Defendant argues that the method in claim 31 is "merely a form of data manipulation" like others that have been found to be patent-ineligible. (D.I. 76 at 16) (citing *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass 'n*, 776 F.3d 1343, 1351 (Fed. Cir. 2014)) The *Digitech* and *Content Extraction* cases are distinguishable. In *Digitech*, the Federal Circuit held that a claimed method was "'so abstract and sweeping' as to cover any and all uses" of a particular concept. 758 F.3d at 1351 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 68 (1972)). There is no evidence here that claim 31 is similarly "abstract and sweeping." Instead, the specific tabular limitations narrow the claim to a particular implementation of transparent data encryption. Claim 31 does not "*generically* recite[] a process" of data manipulation like the claim at issue in *Digitech. Id.* (emphasis added).

The claims at issue in *Content Extraction* "merely recite[d] the use of . . . existing scanning and processing technology to recognize and store data from specific data fields such as amounts, addresses, and dates." 776 F.3d at 1348. The *Content Extraction* Court held that "[t]he concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions." *Id.* at 1347. As already discussed above, claim 31 is

not analogous to a human-executable process, unlike the claims in *Content Extraction*.

Moreover, claim 31 is directed to more than pure data manipulation. It is directed to a *specific* implementation of transparent encryption that improves security and efficiency.

For the foregoing reasons, the Court concludes that representative claim 31, and therefore all asserted claims 31-38, are not directed to an abstract idea.

## 2. Preemption

As indicated in *McRO*, 2016 WL 4896481, at \*9, the preemption-focused question of whether a claim disproportionately ties up use of underlying ideas covered by the claim may be considered in connection with an analysis at step 1. The specific implementation in claim 31 raises fewer preemption concerns than the broader, original claims of the '681 patent which were rejected during reexamination. Defendant has not produced any evidence to support any preemption concerns. Consequently, the preemption consideration confirms the Court's conclusion at step 1 that claim 31 is not directed to an abstract idea. *See id.* ("There has been no showing that any rules-based lip-synchronization process must use rules with the specifically claimed characteristics.").

Plaintiff proffers expert testimony in support of its position that claim 31 is patenteligible. (D.I. 84 Ex. 2 (Expert Declaration of Dr. Craig Wills)) Because Defendant's Motion must be evaluated under Rule 12, the Court does not weigh Plaintiff's expert testimony in its ultimate decision. Nevertheless, the Court notes that (1) Plaintiff's expert opines that "many other unclaimed system architectures and methods are available to address the purpose of the claimed invention [in claim 31]" (D.I. 84 Ex. 2 ¶ 13) and (2) Defendant offers no expert testimony to rebut Dr. Wills's opinions in this regard. Hence, if the Court were to factor in the



extrinsic evidence, this would only further support the Court's conclusion that the claims are patent eligible.

#### 3. Mayo Step 2

Because the Court resolves the § 101 challenge at step 1, the Court does not need to consider whether the claims also involve an inventive concept. However, the Court notes that it opined during the 2016 hearing that "[i]t does appear that [Defendant's] obviousness defense is quite strong." (2016 Tr. at 133) This assessment of Defendant's obviousness case is relevant under step 2 because "[c]ourts have found guidance in deciding whether the allegedly abstract idea (or other excluded category) is indeed known, conventional, and routine, or contains an inventive concept, *by drawing on the rules of patentability*." *Internet Patents*, 790 F.3d at 1347 (emphasis added).

The Court ultimately denied Defendant's motion for summary judgment on obviousness, holding that a reasonable jury could find that a person of ordinary skill in the art would not reasonably expect success in combining Defendant's asserted prior art references. (2016 Tr. at 132-33) In *Bascom*, 827 F.3d at 1350, the Federal Circuit cited a lack of any "reason to combine the limitations as claimed" as a basis for rejecting the district court's analysis related to obviousness, which was undertaken to support the district court's § 101 conclusion (by showing that claim limitations were found in the prior art). The Federal Circuit instructed that "[t]he inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art." *Id.* 

Thus, while the Court continues to view Defendant's obviousness arguments as relatively strong, Defendant's identification of each limitation in the prior art, by itself, would be

insufficient under *Bascom* to render Plaintiff's claims patent-ineligible, even had the Court not already determined that the claims are not directed to an abstract idea.

# IV. CONCLUSION

For the reasons stated above, on the record before the Court in connection with Defendant's Motion, claims 31-38 *are not* directed to an abstract idea and *are* directed to patent-eligible subject matter. Thus, the Court will deny Defendant's Motion. An appropriate order follows.

