

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CARE N' CARE INSURANCE CO. and
TRIZETTO CORP.,
Petitioners,

v.

INTEGRATED CLAIMS SYSTEMS, LLC,
Patent Owner.

Case CBM2015-00062
Patent 7,178,020 B2

Before KALYAN K. DESHPANDE, HYUN J. JUNG, and
TIMOTHY J. GOODSON, *Administrative Patent Judges*.

JUNG, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Care N' Care Insurance Co. and Trizetto Corp. ("Petitioners") filed a Petition (Paper 3, "Pet."), requesting institution of a covered business method patent review of claims 27, 30, 36, 42–45, and 49–52 of U.S. Patent No. 7,178,020 B2 (Ex. 1003, "the '020 patent") under § 18 of the Leahy-Smith America Invents Act ("AIA").¹ Integrated Claims Systems, LLC ("Patent Owner") filed a Preliminary Response (Paper 8). Based on these submissions, we instituted covered business method patent review of claims 27, 30, 36, 42–45, and 49–52. Paper 9 ("Dec. on Inst.").

After institution, Patent Owner filed a Response (Paper 12, "PO Resp."), and Petitioners filed a Reply (Paper 16, "Pet. Reply"). Petitioners proffered the Declaration of Wallace G. Bysinger, Ph.D. (Ex. 1001, "Bysinger Declaration") with its Petition, and a deposition transcript for Dr. Bysinger was filed by Patent Owner (Ex. 2006).

A combined oral hearing in this proceeding and Cases CBM2015-00063 and CBM2015-00064 was held on April 26, 2016; a transcript of the hearing is included in the record (Paper 22, "Tr.").

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioners have shown by a preponderance of the evidence that claims 27, 30, 36, 42–45, and 49–52 are unpatentable.

¹ Pub. L. No. 112-29, 125 Stat. 284, 296–07 (2011).

A. Asserted Grounds of Unpatentability

The covered business method patent review was instituted on the grounds that (1) claims 27, 30, 36, 42–45, and 49–52 are unpatentable under 35 U.S.C. § 101, (2) claims 27, 42–45, and 49–52 are anticipated under 35 U.S.C. § 102 by U.S. Patent No. 5,258,855 to Lech (Ex. 1009, “Lech”), and (3) claims 30, 36, and 42 are obvious under 35 U.S.C. § 103 in view of Lech in combination with U.S. Patent No. 5,054,096 to Beizer (Ex. 1010, “Beizer”). Dec. on Inst. 29.

B. Related Proceedings

The ’020 patent is the subject of multiple proceedings and was asserted against Petitioners in *Integrated Claim Systems, LLC v. Care N’ Care Insurance Co.*, Case No. 2:14-cv-735-JRG (E.D. Tex.). Pet. 1–2, 3; Paper 5, 1; Exs. 1013, 1014. Also, the ’020 patent is the subject of Cases CBM2014-00187 and CBM2015-00063 and is related to the patents at issue in Cases CBM2014-00187 and CBM2015-00064.

C. The ’020 Patent (Ex. 1003)

The ’020 patent relates to “an attachment integrated claims (AIC) system for preparing and processing forms with integrated attachments,” specifically “digital insurance claims including Prior Approval Claim (PAC) Applications containing both a text form and an integrated digitized attachment.” Ex. 1003, 1:21–27.

The ’020 patent describes that the “original system involved hard copy paper claims only, with transmission and all processing done manually.” *Id.* at 1:36–37. The ’020 patent also indicates that the “first significant advancement resulted from the introduction of the mainframe computer,” which “allowed for electronic processing within a given

insurance company, i.e. once the claim was on the computer inside the company, the paper form could be dispensed with.” *Id.* at 1:48–52. The ’020 patent further describes that the “next advancement was the electronic filing of claim forms” that “was made possible by the introduction of the personal computer and modem into the provider’s office.” *Id.* at 2:4–6. The ’020 patent further states that a “National Electronic Information Corporation (NEIC) . . . interfaces between the insurance companies and the service providers” and “establishes rigid standards that must be met in order to transmit an electronic form to an insurance company.” *Id.* at 2:35–41. The ’020 patent, however, describes that many claims “require additional text information that doesn’t fit into the prescribed format” or “require non-text information,” such as “pictures, graphs, additional text not allowed on the standard claim form, sound recordings, etc.,” and “x-rays, EKGs, additional text information such as Operating Room Reports, etc.” *Id.* at 2:62–3:3, 4:3–10. Such claims “are called ‘claims with attachments,’” and include the “PAC (Prior Approval Claim).” *Id.* at 2:63–66, 3:4–5. The ’020 patent describes, “when attachments are required, providers are forced to submit hard copy claim applications.” *Id.* at 3:61–63. The ’020 patent also describes that “insurance companies labor under an administrative system that is a hybrid between a manual and an electronic system.” *Id.* at 3:63–65.

The ’020 patent explains that the “natural next stage in the development of claims processing systems is to attempt to computerize[] this process.” *Id.* at 3:18–20. The ’020 patent describes that “[s]canners are now available that can digitize a dental x-ray.” *Id.* at 3:21–22. However, the ’020 patent states that “transforming the medical evidence into digital form is not enough to facilitate electronic processing of claims with attachments,”

and “[o]ne must also take into consideration the existing claims processing infrastructure, i.e., the legacy infrastructure.” *Id.* at 3:23–27.

Figure 3 is reproduced below:

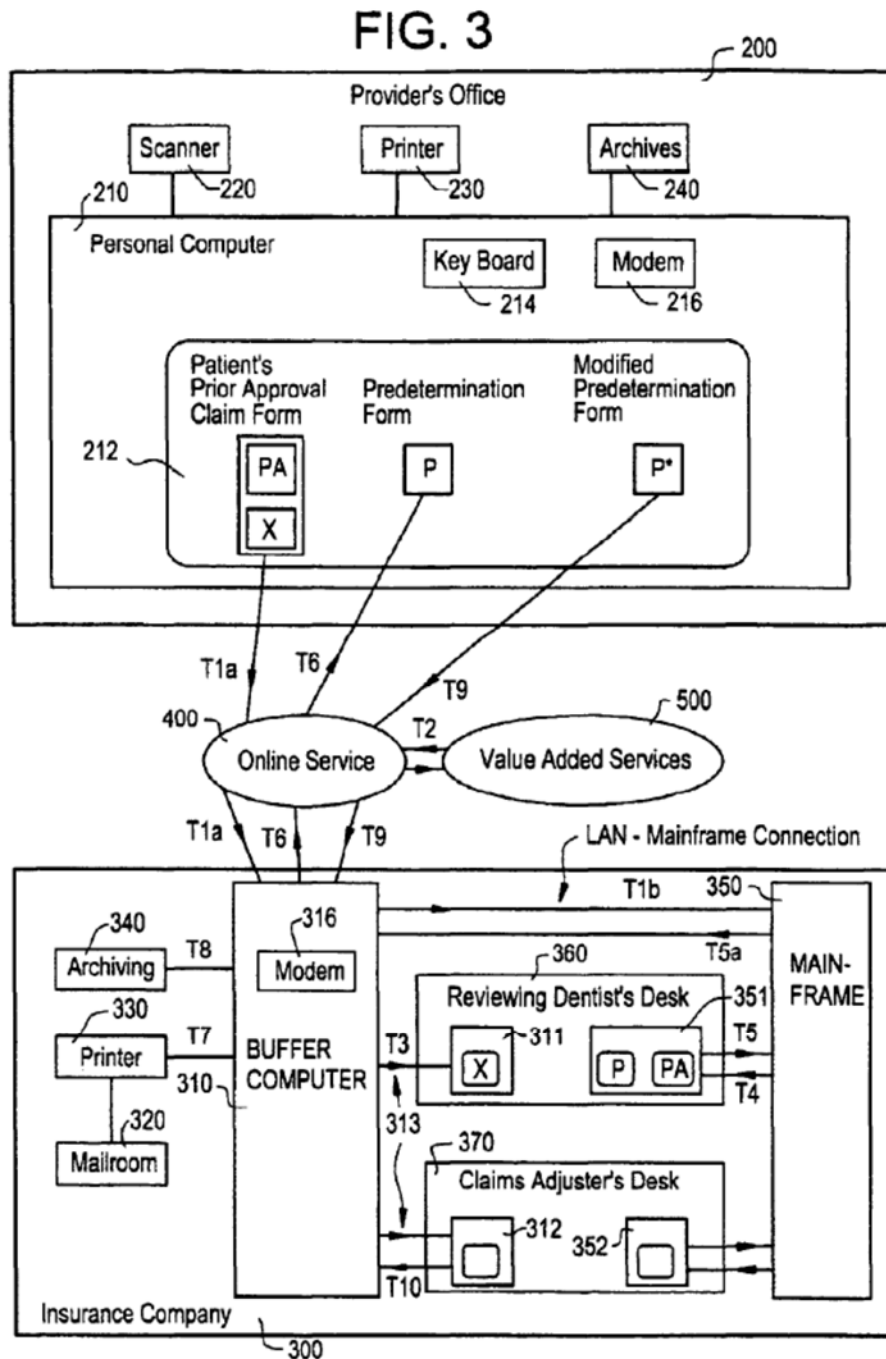


Figure 3 is a combination block and flow diagram. *Id.* at 10:56–59. Components 200 located in the health care provider’s office “include a personal computer **210** . . . and a modem **216**, connected to scanner **220**.” *Id.* at 11:37–39, 11:64–66. “Components **300** located at the insurance company include the previously described mainframe or legacy computer **350** and terminals **351**, **352**.” *Id.* at 12:13–15.

The AIC software is stored in computer system 210. *Id.* at 13:11–14. The ’020 patent describes “commercial software packages, such as LOTUS NOTES™, have been designed with the capability of addressing combinations of text and graphics files,” but the “embodiments . . . are directed at providing integrated text and graphics files within a coherent system and methodology for addressing the specific needs of the work flow, preferably of a particular industry” or “a particular application.” *Id.* at 13:18–28. The ’020 patent states that “[i]t is possible, but not necessary, that the software needed to implement the preferred embodiments of the present invention can be developed within the frame work of the environment created by something such as LOTUS NOTES™.” *Id.* at 13:28–32.

“Contained within the AIC software are PAC forms for insurance companies using the AIC system,” and each PAC form “contains boxes . . . in which alpha-numeric characters can be entered so that, when the characters are entered in these boxes they are entered so as to fill a ‘field,’ a delimited alpha-numeric character string.” *Id.* at 13:35–45. The “information denoted by the characters can be transferred to and used in completing other fields in related documents.” *Id.* at 13:45–47.

A patient's x-ray is digitized, such as by "a scanner **220**, i.e., digitizer, connected to the service provider's computer system running the AIC software." *Id.* at 14:39–14:42. The "PAC application is formed from the electronic PAC form and the digitized patient's x-ray." *Id.* at 14:66–67. The "format of the PAC application advantageously may consist of a text file and an associated digitized image file," and "the text file (i.e., the PAC form) and the image file (i.e., the digitized x-ray) must cross-reference one another (i.e., be correlated) so that these files can be continuously associated with one another after transmission to the insurance company." *Id.* at 15:2–10. The "patient's PAC application can be sent to the insurance company in several ways . . . including via normal phone service, an on-line service, or bulk data transmission lines." *Id.* at 16:40–44.

D. Illustrative Claim

Of the challenged claims, claims 27, 42, and 50 are independent, and claim 27 is reproduced below:

27. A method for operating a digital device operatively coupled to first and second networked components, comprising:
 receiving a unitary data stream including N fields of data;
 parsing the unitary data stream to determine a first portion of the N fields to be routed to the first networked component and a second portion of the N fields to be routed to the second networked component; and
 routing the first and second portions of the N fields to the first and second networked components, respectively,
 where N is a positive integer.

II. CLAIM CONSTRUCTION

Consistent with the statute and the legislative history of the AIA, the Board will interpret claims using the broadest reasonable construction.

37 C.F.R. § 42.300(b); *Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard).

In the Decision on Institution, we interpreted “unitary data stream” as “transmitted set of information.” Dec. on Inst. 12. Patent Owner states that it “agree[s] that such definition is the broadest reasonable construction.” PO Resp. 24; *see also* Pet. Reply 5 (stating “Patent Owner does not dispute that the correct construction of ‘unitary data stream’ for this proceeding is ‘transmitted set of information’”). Based on our review of the complete record, we do not perceive any reason or evidence that now compels any deviation from this interpretation.

Patent Owner further proposes interpreting “fields” as “computer software fields.” PO Resp. 24–33. Petitioners dispute the proposed interpretation of “fields.” Reply 4–7. We see no reason to interpret “fields” as “computer software fields.” We agree with Petitioners that Patent Owner’s proposed construction is circular insofar as the construction includes the entire term being construed. *See* Pet. Reply 5. Further, as discussed below, even if “fields” were interpreted as “computer software fields,” the complete record persuades us that Petitioners have shown unpatentability of the challenged claims by a preponderance of the evidence.

Petitioners also propose interpreting “identities” recited by claims 42–45 and 50–52 as “labels” (Pet. 4), and Patent Owner states that it “does not dispute that such definition is the broadest reasonable construction” (PO Resp. 24). For the purposes of this Decision, we need not expressly construe this or other claim terms further. *See Wellman, Inc. v. Eastman Chem. Co.*,

642 F.3d 1355, 1361 (Fed. Cir. 2011) (“[C]laim terms need only be construed ‘to the extent necessary to resolve the controversy.’”).

III. THE ’020 PATENT AND COVERED BUSINESS METHOD PATENT REVIEW

Section 18 of the AIA limits covered business method patent reviews to persons or their privies that have been sued or charged with infringement of a “covered business method patent.” AIA §§ 18(a)(1)(B), 18(d)(1). Petitioners state that they have been sued for infringement of the ’020 patent in *Integrated Claim Systems, LLC v. Care N’ Care Insurance Co.*, Case No. 2:14-cv-735-JRG (E.D. Tex.) and are not estopped from challenging the ’020 patent. Pet. 3; Exs. 1013, 1014. Patent Owner does not present any arguments disputing these statements.

A. *Financial Product or Service*

Claim 36 depends from claim 27 and recites “wherein the unitary data stream comprises an insurance claim form.” Ex. 1003, 28:20–21.

Petitioners contend that claim 36 is directed to “a method or corresponding apparatus for performing data processing . . . used in the practice, administration, or management of a financial product or service” because it is directed to “an insurance claim form.” Pet. 9–10 (emphasis omitted).

Although claims 8 and 21 are not challenged in this proceeding, Petitioners make a similar argument with respect to those claims, which recite similar subject matter. *Id.* In support of this contention, Petitioners cite a dictionary definition of “insurance” as an agreement to “indemnify another against specified loss in return for premiums paid.” *Id.* (quoting AMERICAN HERITAGE COLLEGE DICTIONARY 705 (3d ed. 1997) (Ex. 1012)). Petitioners also cite Board decisions equating insurance with a financial product or

service in evaluating standing for covered business method patent review. *Id.* at 8–9 (citing *Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co.*, CBM2013-00001, Paper 13 at 6 (PTAB Jan. 27, 2013); *Gillman v. StoneEagle Servs., Inc.*, CBM2013-00047, Paper 11 at 8 (PTAB Feb. 18, 2014)).

Patent Owner responds that, although claim 36 “requires that a received unitary data stream ‘comprises an insurance claim form,’” the claim “does not concern the practice, administration, or management of insurance.” PO Resp. 12. Patent Owner contends that the challenged claims “do not recite improvements to systems or methods for issuance of insurance policies, adjudication of insurance claims or payment for claims” but are “computer technology solutions to a computer network problem” that “improve access to and transfer of information, and associations between text information and attachments.” *Id.* at 12–13. According to Patent Owner, the challenged claims are not directed to “the adjudication of insurance claims . . . according to the underlying insurance claim data, unaffected by how that data is accessed, associated and transferred” or the determination of “whether a claim should be paid based on the information in the insurance claim.” *Id.* at 13. Based on a quote from legislative history, Patent Owner asserts that the ’020 patent claims “hardware and software tools” that “do not bear on the underlying practice, administration or management of those financial activities” and thus, “are not the intended targets of covered business method patent review proceeding.” *Id.* at 14 (citing Ex. 2001).

Patent Owner further argues that “the claimed inventions do not complete or improve any financial activity,” “have no bearing on the

financial activity of insurance,” “are not directed to improvements in adjudicating insurance claims,” and “address technological limitations of mainframe computers and similar legacy systems.” PO Resp. 15–16. Patent Owner contends that the “example embodiments disclosed in the specification of the ’020 Patent . . . are not directed to the practice, administration, or management of insurance products or services, or any other type of financial product or service,” and the “fact that certain insurance companies configure their computer systems in a way that infringes the ’020 Patent claims does not indicate that the ’020 Patent claims are directed to financial products or services.” *Id.* at 16–17.

Petitioners quote the definition of covered business method patent and reply that the language of claim 36 establishes that it recites a method for performing data processing used in the administration or management of insurance claims. Pet. Reply 2. Petitioners also contend that the ’020 patent’s claims and specification “describe insurance claim processing in detail.” *Id.*

A covered business method patent “claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.” AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). Also, “as a matter of statutory construction, the definition of ‘covered business method patent’ is not limited to products and services of only the financial industry, or to patents owned by or directly affecting the activities of financial institutions such as banks and brokerage houses,” and the “plain text of the statutory definition contained in § 18(d)(1) . . . on its face covers a wide range of finance-related

activities.” *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1325 (Fed. Cir. 2015).

For purposes of determining whether a patent is eligible for a covered business method patent review, the focus is on the claims. See Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention, 77 Fed. Reg. 48,734, 48,736 (Aug. 14, 2012). A patent needs only one claim directed to a covered business method to be eligible for review. 77 Fed. Reg. at 48,735–36.

Claim 36 recites the “method as recited in claim 27, wherein the unitary data stream comprises an insurance claim form.” Ex. 1003, 28:20–21. We agree with Petitioners that the plain language of claim 36 establishes that it claims a method for performing data processing used in the administration or management of insurance claims. See Pet. Reply 2. The statutory definition includes patents that claim a method “for performing data processing or other operations *used in* the practice, administration, or management of a financial product or service.” AIA § 18(d)(1) (emphasis added). Here, claim 36 recites a method “wherein the unitary data stream comprises an insurance claim form.” Therefore, the claimed method is “used in” the administration or management of insurance claims.

We also agree that insurance is a financial product or service. See Pet. 10; Ex. 1012. Patent Owner states that the challenged claims “have no bearing on the financial activity of insurance” (PO Resp. 15) and thus does not appear to dispute that insurance is a financial activity. Moreover, in promulgating rules for covered business method patent reviews, the Office considered the legislative intent and history behind the AIA’s definition of

“covered business method patent.” 77 Fed. Reg. at 48,735–36. The “legislative history explains that the definition of covered business method patent was drafted to encompass patents ‘claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.’” *Id.* at 48,735 (quoting 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011) (statement of Sen. Schumer)). The legislative history indicates that “financial product or service” should be interpreted broadly. *Id.* Thus, to the extent that Patent Owner disputes that insurance is a financial product or service, the complete record does not present an argument that persuades us that “financial product or service,” when interpreted broadly, would exclude insurance.

Patent Owner’s arguments that the challenged claims are directed to “computer technology solutions” that “improve access to and transfer of information, and associations between text information and attachments” and “address technological limitations of mainframe computers and similar legacy systems” are not persuasive. See PO Resp. 12–13, 16. These arguments support Petitioners’ assertion that the ’020 patent claims a method “for performing data processing or other operations” but do not identify a deficiency in Petitioners’ contentions that the ’020 patent claims a method “used in the practice, administration, or management of a financial product or service.” These arguments, however, are considered again below in connection with determining whether the ’020 patent is “for a technological invention.”

Patent Owner’s further argument that the challenged claims are excluded from covered business method patent review because they recite “novel software tools and graphical user interfaces that are used by

electronic trading industry workers to implement trading or asset allocation strategies” is also not persuasive. See PO Resp. 13–14 (quoting 157 Cong. Rec. S5433). Claim 27 requires a method for operating a digital device that includes receiving, parsing, and routing fields of a unitary data stream, and claim 36 requires the unitary data stream to include insurance claim data. Claims 27 and 36 do not implement expressly trading or asset allocation strategies or some other strategy that might correlate in the context of insurance. The complete record also presents insufficient evidence to support Patent Owner’s argument regarding “novel software tools and graphical user interfaces.” For example, the arguments presented on this issue present no analysis of the claims, specification, or a citation to any declarant testimony or other evidence.

Furthermore, we are not persuaded that “the claimed inventions do not complete or improve any financial activity,” “have no bearing on the financial activity of insurance,” and “are not directed to improvements in adjudicating insurance claims.” PO Resp. 15. The specification of the ’020 patent indicates that it improves claims processing, bears on the financial activity of insurance, and improves adjudicating claims. The ’020 patent “relates to an AIC system for preparing and processing digital insurance claims” (Ex. 1003, 1:24–25), one purpose of which “is to create a coherent system that allows for the electronic filing, transmission, and processing of ‘insurance claims with attachments’” (*id.* at 8:14–17). All the expressed objects of the ’020 patent relate to a prior approval claim or “PAC,” except for one, which is “to provide a system for packaging textual data with an associated digitized x-ray for transmission to an insurance company.” *Id.* at 8:20–9:40.

Figures 3–6B show embodiments of the claimed invention. *Id.* at 10:56–67. Figures 3–6B and their associated description relate to health or dental insurance. *Id.* at 11:53–55 (“the description which follows describes the invention as it is used in connection with dental insurance forms”). Figures 5A and 5B illustrate “embodiments of the attachment integrated claim application.” *Id.* at 10:62–64.

In addition to dental or health insurance, the ’020 patent states that “the ability to transmit the customizable claim form and integrated attachment . . . permits the transmission of other types of claims, including worker’s compensation claims, to the insurance carrier” (Ex. 1003, 9:23–28), that “casualty insurance claims with supporting documentation . . . are within the scope of the present invention” (*id.* at 11:61–63), that the system “permits many different types of forms to be run off the same system, e.g. commercial insurance claims and workers’ compensation claims” (*id.* at 17:37–40), and that “the present invention has utility in such other areas as Property/Casualty Insurance and law enforcement” (*id.* at 22:30–32). The specification of the ’020 patent, therefore, indicates that it bears on improving the financial activity of insurance, particularly processing and adjudicating claims. We are, thus, not persuaded that “the claimed inventions do not complete or improve any financial activity,” “have no bearing on the financial activity of insurance,” and “are not directed to improvements in adjudicating insurance claims,” as argued by Patent Owner. *See* PO Resp. 15.

For the reasons above, at least claim 36 of the ’020 patent “claims a method . . . for performing data processing or other operations used in the practice, administration, or management of a financial product or service”

(AIA § 18(d)(1)), covers “finance-related activities” (*Versata*, 793 F.3d at 1325), and recites “activities that are financial in nature, incidental to a financial activity or complementary to a financial activity” (77 Fed. Reg. at 48,735). Therefore, the first part of the definition of AIA § 18(d)(1) is satisfied.

B. Technological Invention

The definition of “covered business method patent” in Section 18(d)(1) of the AIA excludes patents for “technological inventions.” To determine whether a patent is for a technological invention, we consider “whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.” 37 C.F.R. § 42.301(b).

The following claim drafting techniques, for example, typically do not give rise to a “technological invention”:

(a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,763–64 (Aug. 14, 2012).

1. A Technological Feature that is Novel and Unobvious

Petitioners assert that claims 27, 30, 36, 42–45, and 49–52 “recite only the use of well-known technology that was common-place when the ’020 Patent’s application was filed.” Pet. 16–19 (citing Ex. 1001; Ex. 1003). In particular, Petitioners argue that claims 27 and 42 recite “only generic computer hardware,” claim 30 “adds only . . . ‘a mainframe computer,’” claims 36 and 49 do not add a “technological feature,” claims 43, 44, 45, 49, 51, and 52 do not add novel and unobvious technology or refinement of process, and claim 50 recites a well-known feature. *Id.* (citing Ex. 1003, 1:36–37, 48–54, 2:35–54, 4:42–51).

Patent Owner responds that the ’020 patent claims “improvements to legacy computer systems” that “have to be custom fitted to the unique needs of each legacy system.” PO Resp. 18. Patent Owner contends that the “word ‘processing’ in the claims refers to the choreography of the received data among the elements of a computer system after it has been improved by the invention,” that the ’020 patent adds “new functionality to those legacy systems,” and that “there is no correlation to the earlier method of submitting insurance claim forms by paper because there was no issue of displaying paper attachments on any screen.” *Id.* at 19. Patent Owner further contends that Petitioners have not shown that the challenged claims “are a result of combining prior art to achieve the normal, expected, or predictable result of that combination,” and “allegations concerning the existence of certain components in the prior art fail[] to show that the ’020 Patent does not recite a technological feature that is novel and unobvious over the prior art.” *Id.* at 21.

Also, in its response to whether the challenged claims meet the first part of the definition of § 18(d)(1), Patent Owner argues that the challenged claims are “computer technology solutions to a computer network problem” that “improve access to and transfer of information, and associations between text information and attachments,” and “address technological limitations of mainframe computers and similar legacy systems.” *Id.* at 12–13, 16.

The full record persuades us that claims 27, 30, 36, 42–45, and 49–52 as a whole do not recite a technological feature that is novel and unobvious over the prior art. Claims 27, 30, and 36 recite a “method for operating a digital device operatively coupled to first and second networked components”; claims 42–45 and 49 recite a “server having specialized software for causing the server to perform a process”; and claims 50–52 recite a “method of processing files formed of identifiable fields.” The parties do not dispute that “the hardware components recited by the Challenged Claims were known.” Pet. 16–19; *see* PO Resp. 20 (stating that “[a]lthough the hardware components recited by the Challenged Claims were known at the time the application leading to the ’020 Patent was filed, the use of computer software fields . . . was not known”); *see also* Pet. Reply 3 (asserting Patent Owner concedes that recited hardware components were known at the time of filing).

The technological features of claims 27 and 42 include “a digital device,” “first and second networked components,” and a “server.” *See* Pet. 22. Claim 50 does not expressly recite any hardware. *See id.* The ’020 patent describes the claimed invention generically without reference to any particular hardware device or specialized software or algorithm. *See, e.g.,*

Ex. 1003, 1:48–50 (“the introduction of the mainframe computer . . . allowed for electronic processing within a given insurance company”), 2:4–6 (“the electronic filing of claim forms . . . was made possible by the introduction of the personal computer”), 17:66–18:3 (“the GUI-capable buffer computer system **310** is a personal computer (PC) or a PC server which advantageously can be operated in parallel with but separate from the insurance company’s mainframe computer **350**”). We find that personal computers, buffer computers, and mainframe computers were known technological features (Ex. 1003, 1:48–50, 2:4–6, 17:66–18:3), and thus, in view of the specification, the recited “digital device,” “first and second networked components,” and “server” were known technological features and prior art technology. Based on the full record, we are persuaded that the challenged claims recite “the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.” *See* 77 Fed. Reg. at 48,764.

Patent Owner also asserts that the “use of computer software fields as required by each claim, including the receipt of computer software fields potentially containing digital attachments, was not known.” PO Resp. 20. Patent Owner argues that “the standard for determining whether a computer-implemented method is novel cannot be whether certain components *can* be adapted to implement the method, because otherwise every software invention would be rendered invalid.” *Id.* Patent Owner also contends that “Petitioners do not allege that any software existed in the prior art that used fields as disclosed in the Challenged Claims” and that “specific limitations in the Challenged Claims relating to the use of computer software fields, including the receipt of software fields containing digital attachments, was

novel and non-obvious at the time of filing.” *Id.* at 21. Patent Owner further notes that, although the claimed invention “could be developed within [Lotus Notes],” that was “not known and did not exist before [Patent Owner’s] patent applications were filed.” *Id.* at 22.

Claims 27, 30, and 36 recite a method that includes receiving, parsing and routing fields of a unitary data stream. Claims 42–45 and 49 recite a “server having specialized software for causing the server to perform a process” that includes receiving and using identifiable fields of an incoming file, and claims 50–52 recite a method that includes receiving and using identifiable fields of an incoming file. Patent Owner’s arguments regarding “fields” and software are not persuasive in view of the express language of the claims. The claims do not require that the recited fields contain a digital attachment, even if the recited fields are computer software fields. We are, thus, not persuaded that “computer software fields” are features that distinguish the challenged claims from the prior art such that the ’020 patent would be excluded from the definition of a covered business method patent.

As stated above, Patent Owner contends that “the standard for determining whether a computer-implemented method is novel cannot be whether certain components *can* be adapted to implement the method, because otherwise every software invention would be rendered invalid.” That contention is unpersuasive. A determination that a claim recites a *technological feature* that is not novel and unobvious over the prior art, and *may* therefore be within the definition of a covered business method, is not a determination on the validity of the challenged claims.

*2. A Technological Feature that Solves a Technical Problem
Using a Technical Solution*

Petitioners assert that the '020 patent addresses “an alleged *business* problem, namely: how to process insurance claims that have attachments.” Pet. 19 (citing Ex. 1003, 8:14–19). In particular, Petitioners contend that “the process for claims with attachments was well-known, but partially manual” and the “'020 Patent’s proposed solution to the alleged problems of paper-based processing of insurance claims with attachments was to ‘computerize[] this process,’ which it describe[s] as the ‘[t]he natural next stage.’” *Id.* at 20 (citing Ex. 1003, 3:18–20). Petitioners also contend that problems with processing claims with attachments (intense labor requirement, slowness, high cost, and susceptibility to errors) are not technical problems but generic business problems and that the '020 patent is directed to solving an alleged problem of inefficiency in a particular business process. *Id.* at 20–21.

Patent Owner responds that the “'020 Patent is directed to solving the technical problem of how to efficiently display text data and associated digital attachments when the text data is stored in a computer such as a mainframe computer, and the attachment data cannot be displayed on a mainframe terminal.” PO Resp. 22; *see also id.* at 18 (arguing that the “'020 Patent is actually directed to solving technical challenges concerning the creation of electronic forms and the handling of forms with digital attachments, regardless of the types of information those forms or attachments contain”); *id.* at 12–13, 16 (arguing that challenged claims are directed to “computer technology solutions to a computer network problem” that “improve access to and transfer of information, and associations

between text information and attachments” and “address technological limitations of mainframe computers and similar legacy systems”). Patent Owner explains that the text data and digital attachment can be transmitted together by incorporating the digital attachment in a field. *Id.* at 22 (citing Ex. 1003, 11:53–60, 14:66–67, 15:58–60, 18:5–10, 18:15–18). Patent Owner also contends that the “fields” of claim 27 “may contain text data, while other fields may contain attachments.” *Id.* (citing Ex. 1003, 18:5–10, 18:33–37).

We agree with Petitioners that the ’020 patent is directed to solving inefficiencies in a claims processing system that is not fully computerized. The ’020 patent purports to “create a coherent system that allows for the electronic filing, transmission, and processing of ‘insurance claims with attachments,’ and to thereby overcome the many deficiencies of the hybrid system claims processing methodology.” Ex. 1003, 8:14–19. The objects of the ’020 patent include providing a system that “minimizes the necessity of manual data entry,” “eliminates handling errors,” “reduce[s] the overall claims processing costs,” associates a PAC “with both the text and the x-ray by a single computer entry,” “operates at lower cost,” “packag[es] textual data with an associated digitized x-ray for transmission to an insurance company,” and “provide[s] a totally digital PAC application processing system” that accommodates text and digitized x-rays, stores customizable claim forms, prescreens information, and automatically enters provider information. *Id.* at 8:20–9:39. We find that the objects of the ’020 patent address the inefficiencies of a claims processing system.

Also, claims 27, 30, and 36 recite a method that includes receiving, parsing and routing fields of a unitary data stream. Claims 42–45 and 49

recite a “server having specialized software for causing the server to perform a process” that includes receiving and using identifiable fields of an incoming file, and claims 50–52 recite a method that includes receiving and using identifiable fields of an incoming file. As discussed above, the ’020 patent describes the claimed invention generically without reference to any particular hardware device or specialized software. Ex. 1003, 1:48–50, 2:4–6, 17:66–18:3 (“computer system **310** is a personal computer (PC) or a PC server which advantageously can be operated in parallel with but separate from the insurance company’s mainframe computer **350**”). The challenged claims do not claim an improvement in any computer-related technology, such as display technology, but instead claim an improvement in handling information with existing computer technology, such as a personal computer. We, thus, find that the ’020 patent is directed to solving inefficiencies in a claims processing system that is not fully computerized, as argued by Petitioners.

For the reasons above, the full record persuades us that the challenged claims do not recite a technological invention that would exclude the ’020 patent from the definition of a “covered business method patent” in AIA § 18(d)(1).

C. Eligible for Covered Business Method Patent Review

Accordingly, for the foregoing reasons and based on the complete record before us, we determine that at least one claim of the ’020 patent (1) recites activities that are financial in nature, and (2) as a whole does not recite a technological feature that is novel and unobvious over the prior art or that solves a technical problem using a technical solution. Thus, we conclude that the ’020 patent is a covered business method patent under §

18(d)(1) of the AIA and is eligible for review using the transitional covered business method patent program.

IV. CHALLENGE UNDER 35 U.S.C. § 101

To prevail in its challenge of claims 27, 30, 36, 42–45, and 49–52 as unpatentable under 35 U.S.C. § 101, Petitioners must prove unpatentability by a preponderance of the evidence. 35 U.S.C. § 326(e); 37 C.F.R. § 42.1(d). Petitioners challenge claims 27, 30, 36, 42–45, and 49–52 as unpatentable under 35 U.S.C. § 101 with citations to the Specification of the '020 patent. Pet. 24–55.

In *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014), the Supreme Court clarified the process for analyzing claims to determine whether claims are directed to patent-ineligible subject matter. In *Alice*, the Supreme Court applied the framework set forth previously in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts.” *Alice*, 134 S. Ct. at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If they are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1297, 1298). In other words, the second step is to “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.” *Id.* (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294). Further, 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 post solution activity.’” *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (quoting *Diamond v. Diehr*, 450 U.S. 175, 191–92 (1981)).

A. Whether the Claims at Issue Are Directed to a Patent-Ineligible Concept

First, we must determine whether the claims at issue are directed to an abstract idea. *Alice*, 134 S. Ct. at 2355. Petitioners argue that claim 50 “claims a pure method, devoid of any apparatus or machine,” and “is simply directed to the abstract idea of transmitting or copying information from a source (a ‘first file’) to a destination (a ‘second file’).” Pet. 29. Petitioners also assert that claim 42 is an apparatus counterpart to claim 50 and “recites the exact same steps as Claim 50.” *Id.* Petitioners, thus, argue that claims 42 and 50 and their dependent claims 43, 44, 45, 49, 51, and 52 are “directed to the abstract idea of transmitting or copying information.” *Id.* at 29–32 (citing Ex. 1003, 1:55–2:3, 5:7–6:49; Ex. 1015). For claim 27, Petitioners argue the claim is “directed to the abstract idea of transmitting or copying information from a source (a ‘unitary data stream’) to destinations (‘networked components’).” Pet. 32. Petitioners further assert that the challenged claims are very similar to the ones found patent-ineligible in *Content Extraction & Transmission v. Wells Fargo Bank*, 776 F.3d 1343 (Fed. Cir. 2014) and *Cyberfone Systems, LLC v. CNN Interactive Group, Inc.*, 558 Fed. App’x 988 (Fed. Cir. 2014) (nonprecedential). Pet. 32–34.

Patent Owner responds that “[i]f a patent claim does NOT pre-empt use of an abstract idea, then the claim is not directed to an abstract [idea]” and that Petitioners fail to show “that the Challenged Claims do not pre-empt the use of the abstract idea of transmitting or copying information from a source to a destination.” PO Resp. 39, 40. Patent Owner asserts that “Petitioners never demonstrate . . . that the Challenged Claims are directed to an abstract idea” because “Petitioner does not follow the *Alice* test by using pre-emption as the determiner . . . while ignoring the other limitations required by the Challenged Claims.” *Id.* at 41. Patent Owner contends that the “Challenged Claims do not pre-empt the use of the abstract idea of transmitting or copying information” and provides examples of how claims 27, 42, and 50 do not pre-empt use of the abstract idea of transmitting or copying. *Id.* at 41–43; *see also id.* at 48–50 (arguing that Patent Owner’s complaint against Petitioners in co-pending litigation does not indicate that any system or method can infringe the ’020 patent, that infringement does not demonstrate the ’020 patent preempts the field of electronic submission and processing of insurance claims, and that “[m]erely claiming an invention with widespread application does not indicate that the invention comprises a[n] . . . abstract idea”).

Petitioners reply that “‘using pre-emption as the determiner’ is not the test set forth for patent eligibility under § 101,” and that the “mere recitation of an allegedly infringing device (which itself may be directed to an abstract idea) cannot change the fact that the Challenged Claims are directed to the abstract idea of copying and transmitting information from a source to a destination.” Pet. Reply 7–9.

We agree with Petitioners. “The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability,” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 134 S. Ct. at 2354). We are not persuaded by Patent Owner’s argument that, because the challenged claims do not preempt completely the abstract idea of transmitting or copying information or the field of electronic submission and processing of insurance claims, the challenged claims are not directed to an abstract idea. Contrary to Patent Owner’s position, “[w]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa*, 788 F.3d at 1379. Furthermore, for the reasons discussed below, we determine that the additional, recited elements of the challenged claims do not transform the challenged claims into patent-eligible applications, and the ’020 patent does not require more than generic computer components. Thus, we find that the risk of preemption is great.

Patent Owner also responds that the “Challenged Claims recite methods for operating a digital device and processing files to perform concrete, circumscribed functions and overcome technical limitations of certain types of computers.” PO Resp. 37–38 (citing *Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859, 869 (Fed. Cir. 2010)). Patent Owner further argues that the recited “fields” are “computer software fields—which can be used as logic control devices, correlated with each other, and used to store attachments such as digitized images” that “identify a key software component of the ’020 Patent . . . and the functions that the configured

software must perform with those fields.” PO Resp. 43–45. Patent Owner thus argues that the challenged claims “relate to computer-implemented methods for transforming data in a particular manner” and “do not ‘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.’” *Id.* at 45–48 (quoting *DDR Holdings, LLC v. Hotels.com*, 773 F.3d 1245, 1259 (Fed. Cir. 2014)). Patent Owner further asserts that the challenged claims “are an improvement to data processing performed by a mainframe computer system or similar systems, allowing processing text data with associated digital attachments.” *Id.* at 48; *see also id.* at 12–13 (arguing that the claims recite “computer technology solutions to a computer network problem” that “improve access to and transfer of information, and associations between text information and attachments”), 16 (arguing that the claims “address technological limitations of mainframe computers and similar legacy systems”), 18 (arguing that the ’020 patent claims “improvements to legacy computer systems” that “have to be custom fitted to the unique needs of each legacy system”), 22 (arguing that the “’020 Patent is directed to solving the technical problem of how to efficiently display text data and associated digital attachments when the text data is stored in a computer such as a mainframe computer, and the attachment data cannot be displayed on a mainframe terminal”).

Petitioners reply that the “Challenged Claims do not contain specific limitations or features that would prevent them from being directed to an

abstract idea” and that “Claim 50 is a generic method claim that does not recite software at all.” Pet. Reply 11.

Turning to the claims, independent claim 27 recites a method that includes receiving and parsing a data stream with N fields and routing portions of the N fields to networked components. Independent claim 42 recites a server that receives a file with identifiable fields and copies a subset of the fields to correlated fields of a second file, and independent claim 50 recites a method that includes receiving a file with identifiable fields and copying a subset of the fields to correlated fields of a second file. Based on the full record before us, we determine that the subject matter of the challenged claims, when considered as a whole, is directed to the abstract idea of transmitting or copying information from a source to a destination.² In particular, the complete record persuades us that the idea of transmitting or copying information from a source to a destination represents a disembodied, well-known concept, *i.e.*, a basic building block of human ingenuity, and that does not rise beyond the level of an abstract idea. See *Content Extraction*, 776 F.3d at 1347 (“Applying *Mayo/Alice* step one, we agree with the district court that the claims of the asserted patent are drawn to the abstract idea of 1) collecting data, 2) recognizing certain data within the collected data set and 3) storing that recognized data in a memory. The concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions.”); *see also*

² Petitioners indicate that the abstract idea formulated in Case CBM2014-00187 does not meaningfully impact the present case. Tr. 77:3–24. Patent Owner does not present any arguments regarding the relationship between the abstract idea found in Case CBM2014-00187 and the abstract idea asserted in this proceeding.

Alice, 134 S. Ct. at 2354 (“[I]n applying the § 101 exception, we must distinguish between patents that claim the “‘buildin[g] block[s]” of human ingenuity and those that integrate the building blocks into something more.”) (quoting *Mayo*, 132 S. Ct. at 1303). We also agree with Petitioners that the challenged claims are similar to the ones found patent ineligible in *Content Extraction*. See Pet. 32; see also *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016) (stating that the Supreme Court and Federal Circuit “have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases”).

The Federal Circuit has recently stated that the first step “cannot simply ask whether the claims *involve* a patent-ineligible concept” and that “some improvements in computer-related technology when appropriately claimed are undoubtedly not abstract, such as a chip architecture, an LED display, and the like.” *Enfish*, 882 F.3d at 1335. Therefore, the Federal Circuit “f[ou]nd it relevant to ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea” and that the “first step in the *Alice* inquiry . . . asks whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1335–1336.

Here, claim 27 recites “a digital device,” “first and second networked components,” and a method that includes receiving and parsing a data stream with N fields and routing portions of the N fields to networked components. Claim 42 recites a “server” that receives a file with identifiable fields and copies a subset of the fields to correlated fields of a second file. Claim 50 does not expressly require any computers and recites a method that

includes receiving a file with identifiable fields and copying a subset of the fields to correlated fields of a second file. The claims do not recite an improvement in computer-related technology, “such as a chip architecture, an LED display, and the like.” *See Enfish*, 882 F.3d at 1335. Patent Owner’s asserted improvement is “an improvement to data processing performed by a mainframe computer system or similar systems, allowing processing text data with associated digital attachments” (PO Resp. 48), but the focus of the challenged claims is not on “processing text data with associated digital attachments.” The claims instead require receiving data with fields and routing or copying a portion or subset of the fields. The asserted improvement is not an improvement in “computer functionality” or capabilities, but instead, as Patent Owner concedes, “an improvement to data processing performed by a mainframe computer system or similar system.” *See* PO Resp. 48. As discussed further below, the challenged claims invoke computers merely as a tool. *See Enfish*, 822 F.3d at 1338 (stating “patent-ineligible claims at issue in other cases . . . recited generalized steps to be performed on a computer using conventional computer activity”); *see also Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, No. 2015-1763, 2016 WL 3514158, at *5 (Fed. Cir. June 27, 2016) (stating that the “*Enfish* claims, understood in light of their specific limitations, were unambiguously directed to an improvement in computer capabilities”).

As for Patent Owner’s arguments regarding the recited “fields,” the claims are not directed to any specific form of “fields of data” or “identifiable fields.” *See Enfish*, 822 F.3d at 1337 (stating “the claims are not simply directed to *any* form of storing tabular data, but instead are specifically directed to a *self-referential* table for a computer database”).

Also, we do not find that the specification of the '020 patent teaches the “fields” of the challenged claims function differently than what the '020 patent describes as having been previously available. *See* Ex. 1003, 2:4–15 (describing that “the next advancement was the electronic filing of claim forms” where “providers fill out an electronic claim form” that “would then be transmitted, as a computer file, to the insurance company”), 2:17–20 (describing that “the technology existed to produce a system that computerized the overall filing and processing of the insurance claim from the point of entry, the provider’s office, to the final report of the claims adjuster”), 13:18–21 (describing that “commercial software packages, such as LOTUS NOTESTM, have been designed with the capability of addressing combinations of text and graphics files”); *see also* *Enfish*, 822 F.3d at 1337 (stating that the “specification also teaches that the self-referential table functions differently than conventional database structures”).

Also, “any novelty in implementation of the idea is a factor to be considered only in the second step of the *Alice* analysis.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). We therefore revisit below Patent Owner’s arguments regarding the use of fields in our analysis for the second step of the *Alice/Mayo* test. *See Bascom*, 2016 WL 3514158, at *5 (stating that “an analysis of whether there are arguably concrete improvements in the recited computer technology could take place under step two”).

Further, the challenged claims here are similar to the ones found patent ineligible in *In re TLI Communications LLC Patent Litigation*, No. 2015-1372, 2016 WL 2865693, at *2 (Fed. Cir. May 17, 2016). As in that case, the specification here indicates that the recited physical components

provide an environment in which to carry out the abstract idea of transmitting or copying information from a source to a destination.

Compare Ex. 1003, 1:48–50 (“the introduction of the mainframe computer . . . allowed for electronic processing within a given insurance company”), 2:4–6 (“the electronic filing of claim forms . . . was made possible by the introduction of the personal computer”), 17:66–18:3 (“the GUI-capable buffer computer system **310** is a personal computer (PC) or a PC server which advantageously can be operated in parallel with but separate from the insurance company’s mainframe computer **350**”), *with TLI*, 2016 WL 2865693, at *3 (stating “the specification makes clear that the recited physical components merely provide a generic environment in which to carry out the abstract idea of classifying and storing digital images in an organized manner”). The recited “digital device,” “networked components,” and “server” of the challenged claims are described in terms of performing generic computer functions. *See* Ex. 1003, 1:48–50, 2:4–6, 17:66–18:5 (“the GUI-capable buffer computer system **310** is a personal computer (PC) or a PC server which advantageously can be operated in parallel with but separate from the insurance company’s mainframe computer **350**; data, however, beneficially can be interchanged between the buffer computer system **310** and the mainframe computer **350**”); *TLI*, 2016 WL 2865693, at *4 (stating that the “server is described simply in terms of performing generic computer functions such as storing, receiving, and extracting data”).

We therefore conclude that the challenged claims are directed to an abstract idea in accordance with the first step of the *Alice/Mayo* test.

B. Whether There are Additional Elements that Transform the Nature of the Claims into a Patent-Eligible Application

After determining whether the claims are directed to an abstract idea, the elements of each claim are considered “both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1297, 1298). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea],’” and the “transformation into a patent-eligible application requires ‘more than simply stat[ing] the [abstract idea] while adding the words “apply it.””” *Id.* at 2357 (alterations in original) (quoting *Mayo*, 132 S. Ct. at 1294, 1297). The *Alice* Court indicated that “claims to a computer system” may be “no different from the method claims [at issue] in substance” if the claims “recite a handful of generic computer components configured to implement the [abstract] idea.” *Id.* at 2360.

Petitioners argue that nothing in the claims “either individually or viewed ‘as an ordered combination’ . . . supplies an inventive concept sufficient to transform the embodied abstract idea into a patent-eligible invention,” and the claims “add only token, conventional computer hardware set forth, if at all, at a high level of generality.” Pet. 35. For claims 50–52, Petitioners assert that these claims “recite[] no additional features supplying an inventive concept.” Pet. 36, 38, 39. For claim 50, Petitioners contend that “a person could perform the recited method . . . with just pen and paper.” Pet. 37.

Petitioners also assert that the preamble of claim 42 is not limiting, recites wholly generic computer implementation, recites “unspecified ‘specialized software,’” and recites software generically. Pet. 40–41. Petitioners distinguish claim 42 from the claims at issue in *DDR Holdings*. Petitioners contend that “the alleged problems the ’020 Patent seeks to solve are generic business or commercial problems” and “not technical problems.” Pet. 42. Petitioners also contend that claim 42 does not require computer technology for the claimed solution because the process carried out by the claimed server is also recited as method claim 50. Pet. 42–43. Petitioners further contend that claim 42 “relies on the ‘conventional functioning’ of computer technology.” Pet. 43. For claims 43–45, Petitioners assert they recite no additional features that supply an inventive concept. Pet. 44–45, 46–47, 48.

Petitioners further argue that claim 27 recites “taking information . . . and sending some of it to one place . . . and some of it to another place,” and recites no additional features that supply an inventive concept. Pet. 49–50. Petitioners also argue that the preamble of claim 27, which recites “digital device,” is not limiting, and the terms “digital device” and “networked components” indicate wholly generic computer implementation. Pet. 50–51. Petitioners assert that claim 27 “does not explain how (if at all) the generic computer implementation recited in Claim 27 is used to perform the claimed method.” Pet. 52. Petitioners contend that claim 36 “merely narrows the abstract idea to a particular field of use, namely to insurance claims forms.” Pet. 55.

Patent Owner responds that “a computer is ‘integral to the claimed invention, facilitating the process in a way that a person making calculations

or computations could not,” and “the fields required by that claim . . . are computer software fields, thereby tying each claim inextricably to a computer.” PO Resp. 50–51 (quoting *Bancorp*, 687 F.3d at 1278). Patent Owner thus asserts that the “[c]laims are ‘necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.’” *Id.* at 52 (citing *DDR Holdings*, 773 F.3d at 1257). Patent Owner also argues that the “use of fields as disclosed and claimed in the ’020 Patent was not routine or conventional.” PO Resp. 52 (citing Ex. 1001, 3:28–32, 18:50–54). Patent Owner distinguishes the challenged claims with those found patent ineligible in *Content Extraction* and *Cyberfone* and cites other cases with claims asserted to be more analogous. PO Resp. 53–56 (citing *Messaging Gateway Sols., LLC v. Amdoc, Inc.*, No. 14-732, 2015 U.S. Dist. LEXIS 49408 (D. Del. Apr. 15, 2015); *Kenexa Brassring, Inc. v. HireAbility.com, LLC*, 2015 U.S. Dist. LEXIS 56156 (D. Mass. Apr. 28, 2015); *Smartflash LLC v. Apple, Inc.*, No. 6:13-cv-447, 2015 U.S. Dist. LEXIS 18419 (E.D. Tex. Jan. 21, 2015)).

Petitioners reply that the challenged claims are not tied to any particular novel machine or apparatus, that the recited hardware components were known, and that computer software fields are not a novel machine or apparatus. Pet. Reply 12–13. Petitioners contend that Patent Owner’s cited cases are not analogous. *Id.* at 13–15.

1. Independent Claim 27

Considering the elements of claim 27 individually, we determine that the functions performed are well-known, routine, conventional activities previously known to the industry. *Alice*, 134 S. Ct. at 2359 (“Taking the claim elements separately, the function performed by the computer at each

step of the process is “[p]urely conventional.”) (citing *Mayo*, 132 S. Ct. at 1298).

A step in the method of claim 27 requires “receiving a unitary data stream including N fields of data.” We find that receiving data with fields was a well-known, routine, conventional activity previously known to the industry. In describing previous advancements, the ’020 patent states that “[o]riginally, an insurance claim was filed by the patient or the health care provider filling out a paper form,” and that “data for each ‘paper’ claim had to be entered into the computer to form an electronic claim” (Ex. 1003, 1:38–39, 1:65–67), that “the next advancement was the electronic filing of claim forms” where “providers fill out an electronic claim form” that “would then be transmitted, as a computer file, to the insurance company” (*id.* at 2:4–15), and that “the technology existed to produce a system that computerized the overall filing and processing of the insurance claim from the point of entry, the provider’s office, to the final report of the claims adjuster” (*id.* at 2:17–20). *See also Alice*, 134 S. Ct. at 2359 (stating “[u]sing a computer to create and maintain ‘shadow’ accounts amounts to electronic recordkeeping—one of the most basic functions of a computer” and “[t]he same is true with respect to the use of a computer to obtain data, adjust account balances, and issue automated instructions; all of these computer functions are ‘well-understood, routine, conventional activit[ies]’ previously known to the industry”).

The ’020 patent also describes, in the Background section summarizing prior art approaches, that a “patient completes that portion of the PAC form that pertains to him . . . and sends it to his provider” (Ex. 1003, 5:17–19), and “[a]fter the PAC form arrives at the provider’s

office[,] . . . information about the provider has to be entered every time a new PAC form is received” (*id.* at 5:20–27). Thus, we find that entering patient and provider information into different, identifiable portions of a form was a well-known, routine, conventional activity previously known to the industry.

Another step in the method of claim 27 requires “parsing the unitary data stream to determine a first portion of the N fields to be routed to the first networked component and a second portion of the N fields to be routed to the second networked component.” We find that parsing data to determine first and second portions was a well-known, routine, conventional activity previously known to the industry. In describing previous advancements, the ’020 patent states that “a paper PAC form is filled out . . . and, along with the substantiating x-ray[,] is mailed to the patient’s insurance company,” and that, “[u]pon entering the mail room of the insurance company, . . . data from the PAC form is then entered into the company’s mainframe computer,” and the “x-ray is then manually delivered to the reviewing dentist.” Ex. 1003, 4:57–65. The ’020 patent also describes that “[s]canner[s] are now available that can digitize a dental x-ray” and that “many personal computers provide the graphics support needed to display the digitized x-ray,” but that “there are significant problems in interfacing a PC with a mainframe computer.” *Id.* at 3:21–22, 3:40–43.

The final recited step of claim 27 requires “routing the first and second portions of the N fields to the first and second networked components, respectively, where N is a positive integer.” We find that routing the portions of the fields to networked components was a well-

known, routine, conventional activity previously known to the industry. The '020 patent describes that, in previous advancements, “claims adjusters access claims information through terminals connected to mainframes.” Ex. 1003, 3:33–34.

As for the “digital device operatively coupled to first and second networked components,” we find that generic computer components can be configured to perform the steps of claim 27. The '020 patent states that an “example of a hybrid system of claim processing currently in use will now be described with reference to FIGS. **1**, **2A** and **2B**.” Ex. 1003, 4:42–44. In describing Figure 1, the '020 patent states that “the insurance company typically has at least one mainframe computer **350** to which terminals **351**, **352** on the respective reviewing dentist’s desk **360** and claims adjuster’s desk are connected.” *Id.* at 4:50–53. In the detailed descriptions of the embodiment shown in Figures 3 and 4, the '020 patent states that “the overall system . . . includes the computer components **200** located in the health care provider’s office and the computer components **300** located on the premises of the insurance company.” *Id.* at 11:36–41. The '020 patent goes on to state that “the components **200** include a personal computer **210**” and that “[c]omponents **300** located at the insurance company include the previously described mainframe or legacy computer **350** and associated terminals **351**, **352**.” *Id.* at 11:64–65, 12:13–15. The '020 patent also describes “a buffer computer **310**, which may be a network server.” *Id.* at 12:15–16. The '020 patent also states that “[p]referably, the GUI-capable buffer computer system **310** is a personal computer (PC) or a PC server which advantageously can be operated in parallel with but separate from the insurance company’s mainframe computer **350**.” *Id.* at 17:66–18:3. The

'020 patent further describes “just a single PC that will incorporate the functions of the elements **310**, **311**, **312**, and **313**.” *Id.* at 18:43–45.

Furthermore, the specification states that “[i]t is possible, but not necessary, that the software needed to implement the preferred embodiments of the present invention can be developed within the frame work of the environment created by something such as LOTUS NOTES™.” Ex. 1003, 13:28–32.

Based on our factual findings from the specification of the '020 patent described above and the full record before us, we determine that the recited “digital device operatively coupled to first and second networked components” can be at least one of a personal computer, legacy computer, network server, or buffer computer. The complete record does not persuade us that the “digital device operatively coupled to first and second networked components” requires more than generic computer components. *See Alice*, 134 S. Ct. at 2357–58 (explaining computer implementation not enough when “the process could be ‘carried out in existing computers long in use’” or when “the computer implementation was purely conventional”).

Considering the full record before us, for the reasons explained above, we determine that claim 27 recites well-known, routine, conventional activities previously known to the industry and generic computer components. *Alice*, 134 S. Ct. at 2359 (“Taking the claim elements separately, the function performed by the computer at each step of the process is ‘[p]urely conventional.’”).

When considered as an ordered combination, we determine that claim 27 adds nothing that is not already present when its elements are considered individually. *See Alice*, 134 S. Ct. at 2359 (“Considered ‘as an ordered

combination,’ the computer components of petitioner’s method ‘ad[d] nothing . . . that is not already present when the steps are considered separately.”); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2014) (“[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.”); *Bancorp*, 687 F.3d at 1278 (explaining that a computer “employed only for its most basic function ... does not impose meaningful limits on the scope of those claims”); *cf. DDR Holdings*, 773 F.3d at 1258–59 (finding a computer-implemented method patent eligible where the claims recite a specific manipulation of a general-purpose computer such that the claims do not rely on a “computer network operating in its normal, expected manner”). Claim 27 “merely recite[s] the abstract idea . . . with the requirement . . . to perform it on a set of generic computer components”; does not “recite a specific, discrete implementation of the abstract idea”; and cannot “be read to ‘improve[] an existing technological process.’” *See Bascom*, 2016 WL 3514158, at *7. As discussed above, claim 27 recites well-known, routine, conventional activities that are arranged conventionally and generically. *See id.* at *6 (stating that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces”).

2. Independent Claim 42

Considering the elements of claim 42 individually, we find that the steps performed by the recited server are well-known, routine, conventional activities previously known to the industry. *Alice*, 134 S. Ct. at 2359 (“Taking the claim elements separately, the function performed by the computer at each step of the process is ‘[p]urely conventional.’”) (citing *Mayo*, 132 S. Ct. at 1298).

Claim 42 recites a “server having specialized software for causing the server to perform a process, the process comprising: receiving an incoming first file comprising a set of N identifiable fields.” We determine that receiving a file with identifiable fields was a well-known, routine, conventional activity previously known to the industry. The ’020 patent states that “[o]riginally, an insurance claim was filed by the patient or the health care provider filling out a paper form” (Ex. 1003, 1:38–39), that “data for each ‘paper’ claim had to be entered into the computer to form an electronic claim” (*id.* at 1:65–67), that “providers fill out an electronic claim form . . . which . . . would then be transmitted, as a computer file, to the insurance company” (*id.* at 2:11–15), and that a “patient completes that portion of the PAC form that pertains to him . . . and sends it to his provider” (*id.* at 5:17–19), and “[a]fter the PAC form arrives at the provider’s office[,] . . . information about the provider has to be entered every time a new PAC form is received” (*id.* at 5:20–27). *See also Alice*, 134 S. Ct. at 2359 (stating “one of the most basic functions of a computer” is “to obtain data,” one of the “‘well-understood, routine, conventional activit[ies]’ previously known to the industry”).

Claim 42 also recites “using identities of the identifiable fields of the first file, copying contents of a first subset of the set of N identifiable fields to correlated fields of a second file.” We find that copying part of the first file to a second file was a well-known, routine, conventional activity previously known to the industry. The ’020 patent states that “[o]riginally, an insurance claim was filed by the patient or the health care provider filling out a paper form,” and that “data for each ‘paper’ claim had to be entered into the computer to form an electronic claim.” Ex. 1003, 1:38–39, 1:65–67. The ’020 patent also describes that “a paper PAC form is filled out” and that “[u]pon entering the mail room of the insurance company, . . . data from the PAC form is then entered into the company’s mainframe computer.” *Id.* at 4:57–65. The ’020 patent further describes that “providers fill out an electronic claim form[,] . . . which . . . would then be transmitted, as a computer file, to the insurance company,” and “[i]n practice, the service provider sends an electronic claim to a vendor, who performs a service such as screening of the form[,] . . . which then retransmits it to the patient’s insurance company.” *Id.* at 2:11–15, 2:42–45.

For the reasons explained above for independent claim 27, we find that the recited “server” requires no more than a generic computer component. Thus, considering the full record before us, we find that claim 42 recites well-known, routine, conventional activities previously known to the industry and generic computer components. *Alice*, 134 S. Ct. at 2359 (“Taking the claim elements separately, the function performed by the computer at each step of the process is ‘[p]urely conventional.’”).

Also, when considered as an ordered combination, we determine that claim 42 adds nothing that is not already present when its elements are

considered individually. *See Alice*, 134 S. Ct. at 2359; *OIP Techs.*, 788 F.3d at 1363 (“[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.”); *Bancorp*, 687 F.3d at 1278 (explaining that a computer “employed only for its most basic function . . . does not impose meaningful limits on the scope of those claims”); *cf. DDR Holdings*, 773 F.3d at 1258–59 (finding a computer-implemented method patent eligible where the claims recite a specific manipulation of a general-purpose computer such that the claims do not rely on a “computer network operating in its normal, expected manner”). Claim 42 “merely recite[s] the abstract idea . . . with the requirement . . . to perform it on a set of generic computer components,” that does not “recite a specific, discrete implementation of the abstract idea,” and cannot “be read to ‘improve[] an existing technological process.’” *See Bascom*, 2016 WL 3514158, at *7. As discussed above, claim 42 recites well-known, routine, conventional activities that are arranged conventionally and generically. *See id.* at *6 (stating that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces”).

3. Independent Claim 50

Considering the elements of claim 50 individually, we find that the functions performed are well-known, routine, conventional activities previously known to the industry. *Alice*, 134 S. Ct. at 2359.

Claim 50 requires “receiving an incoming first file comprising a set of N identifiable fields.” We find that receiving a file with fields was a well-known, routine, conventional activity previously known to the industry. In describing previous advancements, the ’020 patent states that “[o]riginally, an insurance claim was filed by the patient or the health care

provider filling out a paper form” (Ex. 1003, 1:38–39), that “data for each ‘paper’ claim had to be entered into the computer to form an electronic claim” (*id.* at 1:65–67), that “providers fill out an electronic claim form[,] . . . which . . . would then be transmitted, as a computer file, to the insurance company” (*id.* at 2:11–15), and that a “patient completes that portion of the PAC form that pertains to him . . . and sends it to the provider” (*id.* at 5:17–19), and “[a]fter the PAC form arrives at the provider’s office[,] . . . information about the provider has to be entered every time a new PAC form is received” (*id.* at 5:20–27). *See also Alice*, 134 S. Ct. at 2359 (stating “one of the most basic functions of a computer” is “to obtain data,” one of the “‘well-understood, routine, conventional activit[ies]’ previously known to the industry”).

Claim 50 also requires “using identities of the identifiable fields of the first file, copying contents of a first subset of the set of N identifiable fields to correlated fields of a second file.” We find that copying a subset of a first file to a second file was a well-known, routine, conventional activity previously known to the industry. The ’020 patent states that “[o]riginally, an insurance claim was filed by the patient or the health care provider filling out a paper form,” and that “data for each ‘paper’ claim had to be entered into the computer to form an electronic claim.” Ex. 1003, 1:38–39, 1:65–67. The ’020 patent also describes that “a paper PAC form is filled out” and that “[u]pon entering the mail room of the insurance company, . . . data from the PAC form is then entered into the company’s mainframe computer.” *Id.* at 4:57–65. The ’020 patent further describes that “providers fill out an electronic claim form[,] . . . which . . . would then be transmitted, as a computer file, to the insurance company,” and “[i]n practice, the service

provider sends an electronic claim to a vendor, who performs a service such as screening of the form[,] . . . which then retransmits it to the patient's insurance company.” *Id.* at 2:11–15, 2:42–45.

Claim 50 does not recite any computer components for performing its recited steps. Considering the full record before us, for the reasons explained above, we determine that claim 50 recites well-known, routine, conventional activities previously known to the industry. *Alice*, 134 S. Ct. at 2357 (“‘Simply appending conventional steps, specified at a high level of generality,’ was not ‘*enough*’ to supply an “‘inventive concept.’”)). When considered as an ordered combination, our determination is not changed. Claim 50 adds nothing that is not already present when its elements are considered individually. *See Alice*, 134 S. Ct. at 2359. Claim 50 does not “recite a specific, discrete implementation of the abstract idea” and cannot “be read to ‘improve[] an existing technological process.’” *See Bascom*, 2016 WL 3514158, at *7. As discussed above, claim 50 recites well-known, routine, conventional activities that are arranged conventionally and generically. *See id.* at *6 (stating that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces”).

4. *Dependent Claims 30, 36, 43–45, 51, and 52*

Patent Owner states that “Claims 30, 36, 43, [44], 45, 51, and 52 are not unpatentable under 35 U.S.C. § 101 for the same reason that Claims 27, 42, and 50 are not unpatentable.” PO Resp. 50. Patent Owner asserts that “adding additional elements to non-abstract claims does not make them abstract.” *Id.*

For the reasons stated above, we are not persuaded by Patent Owner's arguments for claims 27, 42, and 50 and determine that Petitioners have shown by a preponderance of the evidence that claims 27, 42, and 50 are unpatentable under 35 U.S.C. § 101. We adopt Petitioners' contentions as our findings with regard to the unpatentability of claims 30, 36, 43–45, 51, and 52, which depend from claims 27, 42, and 50. Pet. 24–55.

We agree with Petitioners that claims 30, 36, 43–45, 51, and 52 recite “no additional features supplying an inventive concept.” Pet. 38–40, 44–48, 53–55. Claims 36, 43–45, 51, and 52 require the unitary data stream to comprise an insurance claim form, field identities to be field names, copying based solely on field identities, and field identities of the second file correlate to field identities of the first file. We determine that further limitations on the data fail to transform these claims into a patent eligible application because they recite well-known, routine, conventional activities previously known to the industry and performed by generic computer components. Ex. 1003, 2:11–15 (“providers fill out an electronic claim form . . . which . . . would then be transmitted, as a computer file, to the insurance company”), 2:42–45 (“In practice, the service provider sends an electronic claim to a vendor, who performs a service such as screening of the form . . . which then retransmits it to the patient's insurance company.”), 4:60–64 (“Upon entering the mail room of the insurance company, the PAC form is assigned a document identification number (DIN) and . . . [t]his same DIN is affixed to the x-ray.”).

Claim 30 recites “wherein the first networked component comprises a mainframe computer,” and we agree with Petitioner that “mainframe computers were well-known prior art technologies.” Pet. 53 (citing Ex.

1003, 4:42–51). For the reasons explained above, we determine that the addition of a mainframe computer, when considered individually and as an ordered combination, fails to transform claim 30 into a patent eligible application. *Alice*, 134 S. Ct. at 2357–58 (computer implementation not enough when “the process could be ‘carried out in existing computers long in use’”).

C. Machine-or-Transformation Test

Petitioners also assert that the challenged claims fail the machine-or-transformation test, which provides “a useful clue in the second step of the *Alice* framework.” Pet. 35–36 (quoting *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014)). For claims 50–52, Petitioners argue that these claims fail the machine-or-transformation test because they do not require the method to be performed by a particular machine, or a machine at all, and they recite collecting and organizing data. Pet. 37, 39, 40.

Petitioners also argue that independent claim 42 “recites a perfunctory and obvious computer mechanism . . . for completing a recited process,” the method of claim 50 which does not recite a server, and thus, the server of claim 42 “does not ‘play a significant part in permitting the claimed method to be performed.’” Pet. 44. For claims 43–45, Petitioners assert that the recited “server” does not play a significant part in performing the claimed method. Pet. 45, 47, 48–49.

Petitioners contend that, although independent claim 27 recites “digital device” and “networked components,” they are token post-solution components and do not play a significant part in permitting the claimed method to be performed. Pet. 52. Petitioners argue that the recited digital device’s role is unclear and the recited network components are destinations

for data with no other roles. Pet. 52–53. Petitioners also contend that claim 27 merely requires collecting and organizing data. Pet. 53. For claim 30, Petitioners argue the recited mainframe and second network component “don’t actually do anything in the claimed method” and do not transform a particular article into a different state or thing. Pet. 54. Petitioners further contend that claim 36 “adds no machine to what is recited in Claim 27, nor does it add any steps to the claimed method . . . that would ‘transform[] a particular article into a different state or thing.’” Pet. 55.

Patent Owner does not respond with any arguments or evidence regarding Petitioners’ assertions that the challenged claims fail the machine-or-transformation test. However, we address below Patent Owner’s arguments that a computer is integral to the claimed invention because of the recited fields (PO Resp. 50–53) in the context of the machine-or-transformation test.

While the machine-or-transformation test is not the sole test governing § 101 analyses, the “test can provide a ‘useful clue’ in the second step of the *Alice* framework.” *Ultramercial*, 772 F.3d at 716. As explained above, the full record persuades us that the challenged claims are not tied to any particular novel machine or apparatus, only a general purpose computer. *See, e.g.*, Ex. 1003, 11:64–65 (“the components **200** include a personal computer **210**”), 12:13–15 (“[c]omponents **300** located at the insurance company include the previously described mainframe or legacy computer **350** and associated terminals **351**, **352**”), 12:15–16 (“a buffer computer **310**, which may be a network server”), 17:66–18:3 (“[p]referably, the GUI-capable buffer computer system **310** is a personal computer (PC) or a PC

server which advantageously can be operated in parallel with but separate from the insurance company's mainframe computer **350**").

We thus determine that the challenged claims "could be 'carried out in existing computers long in use'" (*Alice*, 134 S.Ct. at 2357) and that these claims are "not tied to any particular novel machine or apparatus, only a general purpose computer" (*Ultramercial*, 772 F.3d at 716–17).

Also, we find that claims 27 and 42 add a computer to perform steps that are well-known, routine, conventional activities previously known to the industry. Claim 50 does not recite explicitly any computer component. As discussed above, the full record persuades us that these claims recite well-known, routine, conventional activities. Ex. 1003, 1:38–39 ("[o]riginally, an insurance claim was filed by the patient or the health care provider filling out a paper form"), 1:65–67 ("data for each 'paper' claim had to be entered into the computer to form an electronic claim"), 2:11–15 ("providers fill out an electronic claim form . . . which would be stored in the memory of their PCs, would then be transmitted, as a computer file, to the insurance company"). Claims 27 and 42 add a general-purpose computer adapted for these conventional activities and thus, are not patent-eligible. *Ultramercial*, 772 F.3d at 716–17 (explaining that "adding a computer to otherwise conventional steps does not make an invention patent-eligible.").

As for the transformation prong of the machine-or-transformation test, the challenged claims require receiving data and then routing the data or copying a subset of the data. In other words, the claims collect, organize, and transmit data, all of which are insufficient to meet the transformation prong of the test. *Ultramercial*, 772 F.3d at 717 (stating that "[a]ny transformation from the use of computers or the transfer of content between

computers is merely what computers do and does not change the analysis”); *CyberSource*, 654 F.3d at 1370 (stating that the “mere collection and organization of data regarding credit card numbers and Internet addresses is insufficient to meet the transformation prong of the test”). We, thus, determine that the challenged claims also fail the transformation prong of the machine-or-transformation test.

On the full record before us, we determine that the challenged claims fail the machine-or-transformation test. While this test is not conclusive, it is a further reason why the challenged claims are unpatentable under 35 U.S.C. § 101. *See Ultramercial*, 772 F.3d at 717.

D. Conclusion as to the Challenge Under 35 U.S.C. § 101

For the reasons discussed above and based on the full record before us, we conclude that Petitioners have shown, by a preponderance of the evidence, that claims 27, 30, 36, 42–45, and 49–52 are unpatentable under 35 U.S.C. § 101.

V. CHALLENGE UNDER 35 U.S.C. § 102

To prevail in its challenge to claims 27, 42–45, and 49–52 as anticipated by Lech, Petitioners must prove unpatentability by a preponderance of the evidence. *See* 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d).

In finding a claim anticipated, “[t]he identical invention must be shown in as complete detail as is contained in the patent claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989), *abrogated on other grounds as recognized by Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1148 (Fed. Cir. 2011). Moreover, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly

or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

Petitioners challenge claims 27, 42–45, and 49–52 of the ’020 patent as anticipated by Lech with citations to the reference and the Bysinger Declaration (Ex. 1001). Pet. 56–72.

A. Lech (Ex. 1009)

Lech describes “a system for efficiently processing information originating from hard copy documents.” Ex. 1009, 1:5–7. Lech addresses the problem that different users within a computer network may need to access different portions of the information contained in the hard copy documents. *Id.* at 1:34–44. Lech also sought to address the problem that different programs must receive the information from the hard copy documents in different formats. *Id.* at 1:45–68. Figure 1 of Lech is reproduced below:

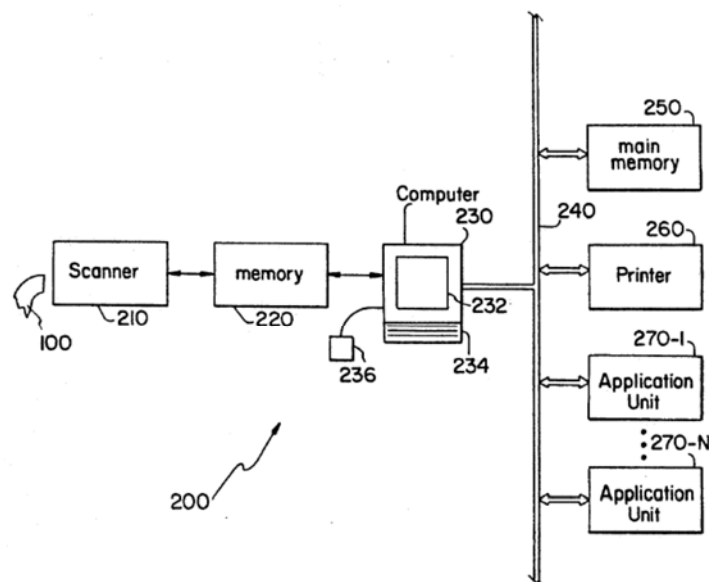


FIG 1

Figure 1 illustrates hardware for implementing a preferred embodiment of Lech. *Id.* at 3:38–39. As depicted in Figure 1, interface 200 processes

information from hard copy document 100 and provides the information to application units 270 in the form that each particular unit requires. *Id.* at 4:56–59.

Scanner 210 extracts the information from hard copy document 100, and the scanned information is stored in scanner memory 220 or in main memory 250. *Id.* at 4:59–65. Figure 2 of Lech is reproduced below:

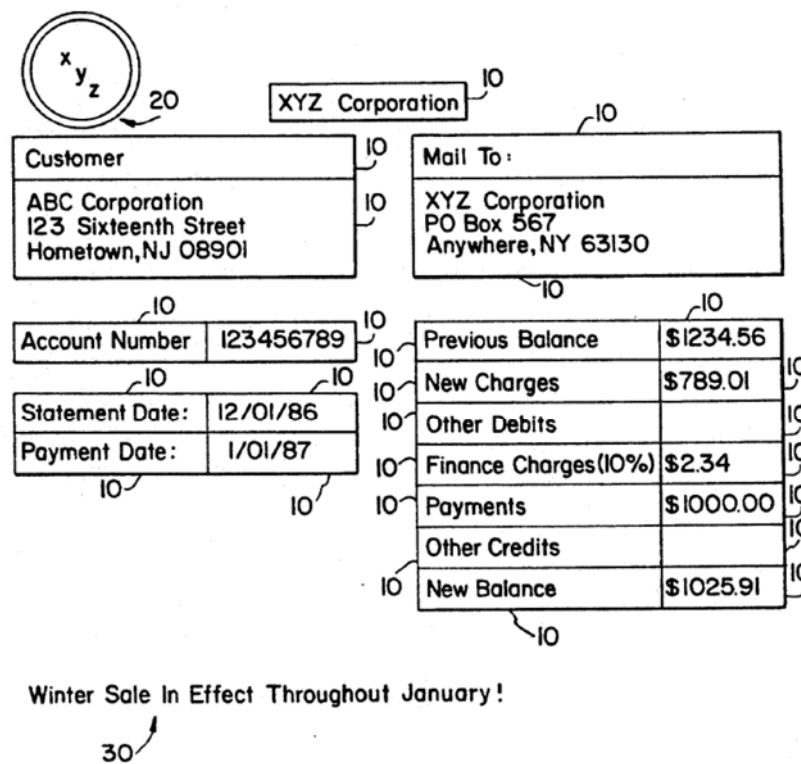


FIG. 2

Figure 2 shows an example hard copy document 100 containing information to be processed. *Id.* at 3:40–42, 5:59–61. In a first operational mode, scanner 210 “stores all of the information extracted off of hard copy document **100**.” *Id.* at 5:66–68. The extracted information is stored in two forms. *Id.* at 6:1–2. An actual image of hard copy document 100 is stored as image information, and text recognized by, for example, character recognition software is stored as textual information. *Id.* at 6:1–10. In a

second mode of operation, hard copy document 100 is scanned and displayed on display 232 of computer 230. *Id.* at 6:11–16, Fig. 3A.

The information is then transmitted from scanner memory 220 or main memory 250 to computer 230, which generates an input file for a particular application unit. *Id.* at 5:1–2, 25–26. In particular, “computer 230 is used to select portions of the stored document information contained in memory in accordance with content instructions which define portions of the stored document information required by an application unit.” *Id.* at 5:8–12.

Computer 230 also formats the selected stored document information into the transmission format used by an application unit. *Id.* at 5:17–20. Computer 230 can send the input file directly to an application unit or store it in main memory 250 for later use by an application unit. *Id.* at 5:38–42.

B. Claim 27

Petitioners contend that Lech anticipates claim 27. Pet. 58–62 (citing Ex. 1001 ¶¶ 62, 64; Ex. 1009, 1:34–35, 3:62–63, 4:46–49, 5:29–32, 5:59–6:16, 9:29–30, 13:57–64, 14:3–10, 15:58–60, Figs. 1, 2, 11, 12A–12C, claims 38, 55). In particular, for “receiving a unitary data stream including N fields of data,” as recited by independent claim 27, Petitioners argue that hard copy document 100 “contains multiple fields of data, as illustrated in Fig. 2.” Pet. 59 (citing Ex. 1009, 5:59–65). Petitioners assert that hard copy document 100 is “preferably scanned and fields of information on it are recognized using standard optical character recognition software” and the scanned document and fields of information can be sent to computer 230. *Id.* at 59–60 (citing Ex. 1001 ¶ 64; Ex. 1009, 5:66–6:16).

Patent Owner responds that “Lech discloses scanning hard copy documents and sending the output from the scanner to computer 230” but

“nowhere does Lech indicate that the output from the scanner is sent to the computer as fields.” PO Resp. 58. Patent Owner contends that the cited portion of Lech does not disclose that output from Lech’s scanner is sent to computer 230 in fields and the Bysinger Declaration cites the same portion of Lech to assert that textual fields of information are sent to the computer. *Id.* at 58–59 (citing Ex. 1009, 6:11–16). Patent Owner also contends that the textual fields of information identified by the Bysinger Declaration are “areas on a hard copy document, not part of the unitary data stream allegedly received by computer 230” and that, in his deposition, Dr. Bysinger testified that “a digital image is not a field.” *Id.* at 59 (citing Ex. 1001 ¶ 64; Ex. 2006, 213:6–10). Petitioners reply that its Petition cites to Figure 2 of Lech and its associated description. Pet. Reply 16 (citing Pet. 59–60; Ex 1009, 5:66–6:8, Fig. 2).

Patent Owner’s arguments are not persuasive. For the step of “receiving a unitary data stream including N fields of data,” Petitioners cite column 5, line 59 to column 6, line 16 and Figure 2 of Lech, not just column 6, lines 11–16. Pet. 59–60. In the cited portion, we find that Lech discloses that “scanner **210** stores all of the information extracted off of hard copy document **100** in the scanner memory **220**” and that the “extracted information is stored in two forms . . . as image information [and] textual information recognized on the hard copy document **100** by, for example, employing standard character recognition software.” Ex. 1009, 5:66–6:7. We find that the portion of Lech cited by Petitioners supports their contention that the “exemplary hard copy document 100 of Fig. 2 is preferably scanned in and fields of information on it are recognized using standard optical character recognition software.” Pet. 59–60 (citing Ex.

1001 ¶ 64; Ex. 1009, 5:66–6:8). We also agree with Petitioners that the stored information is sent to computer 230. The portion of Lech cited by Petitioners discusses first and second operational modes and explicitly states that, in the second mode of operation, the information is displayed on computer 230. Ex. 1009, 6:13–16. The first and second operational modes appear to differ by how much of the document is scanned, not where the scanned information is sent. *See id.* at 6:63–67 (describing that “[t]hese second modes of operation are efficient for small businesses . . . since the user does not necessarily have to store all of the information that appears on the hard copy document”). Moreover, we find that Lech expressly discloses that the “information from scanner memory **220** or main memory **250** is transmitted to computer **230**.” Ex. 1009, 5:1–2. Petitioners provide an asserted understanding of Lech by one of ordinary skill in the art in an “Overview of Lech,” and Petitioners cite this same portion of Lech to assert that the “document image, the extracted textual information, or both are then sent to a computer.” Pet. 56–57 (citing Ex. 1001 ¶ 52). We, thus, find that Lech discloses that the output from the scanner is sent to the computer 230 and that the output includes information in fields, as shown in Figure 2 of Lech, and therefore, discloses “receiving a unitary data stream including N fields of data,” as required by claim 27.

As for Dr. Bysinger’s deposition testimony, when viewed in its entirety, we determine that Dr. Bysinger did not contradict his declaration. For example, while Dr. Bysinger testified that a “digital image is not a field” (Ex. 2006, 213:9–10), he also testified that a “digital image itself is basically identified by the field label of that image because . . . it’s considered a data element in total” (Ex. 2006, 212:1–6) and a “data image . . . needs an

identifier, a field identifier, and it is stored as a single element with the field identifier attached to it” (Ex. 2006, 212:11–15). *See also* Pet. Reply 17–18 (citing Ex. 2006, 163:24–164:9, 210:25–211:3, 211:8–12, 216:8–12, 216:18–20, 220:15–18, 220:23–221:2, 222:22–223:6).

Further, we adopt Petitioners’ contentions as our findings regarding the remaining limitations of claim 27, for which Patent Owner presents no arguments. Accordingly, based on the complete record before us, we determine that Petitioners have shown by a preponderance of the evidence that claim 27 is anticipated by Lech.

C. Claims 42 and 50

Petitioners contend that Lech anticipates claims 42 and 50, which Petitioners contend are “substantively identical, differing only in their preambles, which are not limiting.” Pet. 62–66 (citing Ex. 1001 ¶¶ 70–76; Ex. 1009, 3:20–28, 4:24–26, 4:39–40, 5:1–2, 5:8–11, 5:59–6:16, 6:23–25, 6:45–50, 6:53–58, 8:68–9:2, 13:1–3, 13:6–13, Figs. 1, 2, 3B).

For “receiving an incoming first file comprising a set of N identifiable fields,” as recited by independent claims 42 and 50, Petitioners argue that hard copy document 100 is such an incoming file and is received by computer 230 after scanning by scanner 210 and that the fields are identifiable because the hard copy document labels each field with a name. Pet. 63–64 (citing Ex. 1001 ¶ 73; Ex. 1009, 5:1–2, 5:59–6:16, Fig. 2).

Patent Owner responds that “nowhere does Lech indicate that the output from the scanner is sent to the computer as fields, let alone as ‘identifiable fields’ as is required by claims 42 and 50.” PO Resp. 60 (discussing Pet. 63; Ex. 1001 ¶ 73; Ex. 1009, 5:59–6:16). Patent Owner also responds that Dr. Bysinger’s declaration and deposition testimony “concern

how data is *stored* in a computer, as opposed to how data may be *received*.”
Id. at 61–62 (citing Ex. 1001 ¶ 71; Ex. 2006, 210:23–211:3, 213:6–10, 218:2–6).

We are not persuaded that Lech fails to disclose “receiving an incoming first file comprising a set of N identifiable fields,” as recited by independent claims 42 and 50. For the reasons discussed above for a similar recitation in claim 27, we find that Lech discloses that hard copy document 100 has fields of information (Ex. 1009, 5:66–6:8), that “scanner **210** stores all of the information extracted off of hard copy document **100** in the scanner memory **220** . . . in two forms . . . as image information [and] textual information recognized on the hard copy document **100** by, for example, employing standard character recognition software” (Ex. 1009, 5:66–6:7), and that the “information from scanner memory **220** or main memory **250** is transmitted to computer **230**” (Ex. 1009, 5:1–2). We, thus, find that Lech discloses “receiving an incoming first file comprising a set of N identifiable fields,” as recited by independent claims 42 and 50.

We do not agree that Dr. Bysinger’s testimony only concerns how data is stored. In several instances, the deposition testimony of Dr. Bysinger indicates that data streams contain fields. Ex. 2006, 163:24–164:9, 210:25–211:3, 211:8–12, 216:8–12, 216:18–20, 220:15–18, 220:23–221:2, 222:22–223:6. When the deposition testimony is considered along with the disclosure of Lech, we are persuaded that Lech discloses “receiving an incoming first file comprising a set of N identifiable fields,” as recited by independent claims 42 and 50.

The preamble of claim 42 recites a “server having specialized software for causing the server to perform a process.” Patent Owner

responds that the preamble of claim 42 is limiting “because it helps determine the meaning of the claim” and that the preamble “indicates that the recited process is performed by a server.” PO Resp. 62–63. Patent Owner contends that Petitioners’ assertion that computer 230 is a server is unsupported. *Id.* at 63–64 (discussing Pet. 62, 79; Ex. 1001 ¶ 68–70; Ex. 2006, 180:22–182:16).

Petitioners provide sufficient evidence for us to find that computer 230 is a server. Although Lech does not expressly describe computer 230 as a server, Petitioners contend that the disclosed functions of computer 230 indicate that computer 230 is a server. Pet. 62–63 (citing Ex. 1009, 3:26–28, 4:24–26, 5:1–2, 5:8–11, Fig. 1). Petitioners also cite to the Bysinger Declaration to assert that one of ordinary skill in the art would understand that computer 230 is a server (*see id.*), which Patent Owner asserts was undermined by Dr. Bysinger’s deposition testimony (PO Resp. 63–64 (citing Ex. 2006, 180:22–182:16)). However, when considering the deposition testimony in its entirety, we are not persuaded that one of ordinary skill in the art would fail to understand that computer 230 is a server. *See* Ex. 2006, 180:15–182:16. When the full record is considered, we find that Lech discloses the recited server of claim 42 by a preponderance of the evidence.

Claim 42 further recites that the process comprises “using identities of the identifiable fields of the first file, copying contents of a first subset of the set of N identifiable fields to correlated fields of a second file.” Patent Owner argues that computer 230 could not perform the process of claim 42 because it “does not use the identities of fields to copy content of the fields to correlated fields” because “it is the user and not the computer that

allegedly uses identities of fields to copy content between fields.” *Id.* at 66–67 (discussing Pet. 64; Ex. 2006, 296:8–13).

The full record supports Petitioners’ assertion that Lech discloses computer 230 as “using identities of the identifiable fields of the first file, copying contents of a first subset of the set of N identifiable fields to correlated fields of a second file.” Pet. 64–65 (emphasis omitted). Lech discloses that an “information provided by the user defines a template which is used to extract information off the document and associate the extracted information with a particular variable or subfile” (Ex. 1009, 8:68–9:2), that Figure 3B illustrates a display “split into two portions” (*id.* at 6:47), and that “[w]hile observing the split display, the user can input instructions to associate specific pieces of information on the hard copy document (for example, the vendor name indicated by . . . 232A) with particular subfiles in memory (for example, the vendor field next to . . . 232C . . .)” (*id.* at 6:52–58). Based on Petitioners’ cited portions of Lech and the Bysinger Declaration (Pet. 64–65), we find that Lech discloses computer 230 “using identities of the identifiable fields of the first file” to copy “contents of a first subset of the set of N identifiable fields to correlated fields of a second file,” as required by claim 42.

Patent Owner also argues that the “‘fields’ allegedly shown on the left side of the display are not ‘fields.’” PO Resp. 67. The full record supports Petitioners’ position that the recited fields are shown in Figure 3B (Pet. 64–65 (citing Ex. 1009, 6:23–25, 6:53–58, Fig. 3B); Pet. Reply 23 (citing Ex. 1009, 4:24–26, Fig. 3B)) and fields in Lech’s template are found on a digitized document image displayed on a computer screen by software (Pet. 65 (citing Ex. 1009, 4:39–40, 8:68–9:2, 13:1–3, 13:3–6); Pet. Reply 23).

Patent Owner further argues that the “‘fields’ allegedly included on a document image could not store a digital image.” PO Resp. 68. We are not persuaded because claim 42 does not require the recited field to store a digital image.

Patent Owner further asserts that “Petitioners fail to identify a ‘second file.’” *Id.* at 69. This is not persuasive as the complete record supports Petitioners’ position that Lech’s “required application program” discloses the recited “second file.” See Pet. 64 (citing Ex. 1009, 6:45–50, 6:53–58, Fig. 3B); Pet. Reply 23–24.

We adopt Petitioners’ contentions as our findings regarding the remaining limitations of claims 42 and 50, for which Patent Owner presents no arguments. For the reasons discussed above, we find that Lech discloses the limitations of claims 42 and 50, and therefore, on the complete record before us, we determine that Petitioners have shown, by a preponderance of the evidence, that Lech anticipates claims 42 and 50.

D. Dependent Claims 43–45, 49, 51, and 52

Petitioners contend that Lech discloses all the limitations of dependent claims 43–45, 49, 51, and 52. Pet. 66–72 (citing Ex. 1001 ¶¶ 77–85; Ex. 1009, 3:22–25, 4:39–40, 6:45–62, 7:1–11, 7:15–17, 7:19–24, 7:26–30, 8:68–9:2, 9:43–50, 9:64–67, 11:67–12:3, 12:9–21, 12:43–50, 14:53–55, Figs. 2, 12A, 13A).

Claim 49 recites “wherein the process of copying the content of a first subset of the set of N identifiable fields to correlated fields of a second file occurs in response to the first file being opened,” and Patent Owner responds that Lech does not disclose its limitations. PO Resp. 69. Patent Owner asserts that Petitioners merely show an order of operation and not a

relationship between opening the file and copying of content. *Id.* at 70–71 (citing Pet. 70–71; Ex. 1009, 11:67–12:13; Ex. 2006, 318:7–15). Patent Owner argues that “there is no indication in Lech that the extraction occurs *in response* to the opening of the document by the extract module.” *Id.* at 71.

We find that Lech discloses that “the user uses the extract module **2.3.1** to identify a document to be processed” (Ex. 1009, 12:1–3), “[t]he document is then retrieved . . . and passed to the extract data module **2.3.1**” (*id.* at 12:3–5), and after defining parameters or selecting a template, the “extract data module **2.3.1** extracts pieces of data from the image copy of the document” (*id.* at 12:5–10). Petitioners cite this portion of Lech and others as evidence that the “identification of a document to be processed is the *opening of the first file . . . and in response*, the extract data module . . . *cop[ies] the contents of a first subset of the set of N identifiable fields to correlated fields of a second file.*” Pet. 70–71. Petitioners also cite to paragraphs 81–83 of the Bysinger Declaration. Pet. 71. Paragraph 83 states that a person of ordinary skill in the art “would know that the copying in Lech [] is done in response to the first file being opened.” *See also* Ex. 2006, 322:17–324:9, 328:4–17 (further explaining what a person of ordinary skill in the art would understand from the disclosure of Lech for this limitation). The full record presents sufficient evidence for us to find that Petitioners’ interpretation of Lech is correct, and Patent Owner provides no persuasive evidence to the contrary. *See also* Pet. Reply 25 (stating that “Patent Owner supplies no expert testimony or evidence to the contrary”). We, therefore, find that Lech discloses “wherein the process of copying the content of a first subset of the set of N identifiable fields to correlated fields

of a second file occurs in response to the first file being opened,” as recited by claim 49.

As for the remaining dependent claims, Patent Owner states that “[b]ecause Petitioners failed to show that all elements of Claims 27, 42, and 50 are disclosed in Lech . . . , Challenged Claims . . . 43, 44, 45, 49, 51, and 52 that depend on Claim 27, 42, or 50 – and therefore require every element of Claim 27, 42, or 50 – are also not anticipated . . . in view of Lech.” PO Resp. 69.

For the reasons above, we find that Lech discloses the limitations of claims 27, 42, and 50 and their dependent claims 43–45, 49, 51, and 52. Accordingly, we determine that Petitioners, by a preponderance of the evidence, have shown that claims 27, 42–45 and 49–52 are anticipated by Lech.

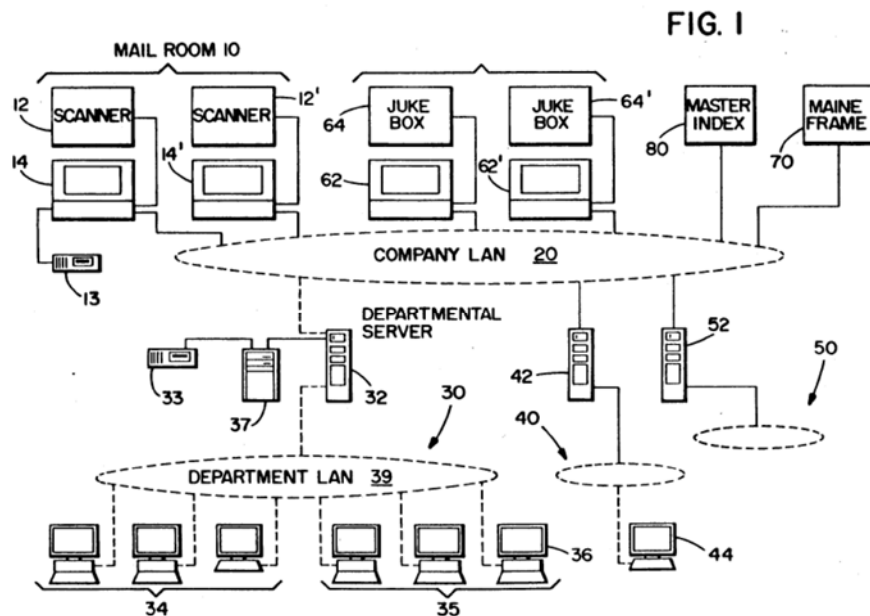
VI. CHALLENGE UNDER 35 U.S.C. § 103

Petitioners challenge claims 30, 36, and 42 of the ’020 patent as unpatentable over Lech and Beizer with citations to the references and the Bysinger Declaration. Pet. 72–79.

A. *Beizer (Ex. 1010)*

Beizer is titled “Method and Apparatus for Converting Documents into Electronic Data for Transaction Processing.” Beizer seeks to improve on the methods of processing documents in paper-intensive businesses, such as insurance claim processing companies. Ex. 1010, 1:11–14, 30–32. In Beizer’s method, documents are scanned upon receipt, and all subsequent operations are carried out on the basis of the image of the scanned

document. *Id.* at 3:24–29. Figure 1, reproduced below, shows the general layout for the system:



As depicted in Figure 1, documents are received in mailroom 10, where they are fed into scanners 12 to convert images of the documents into digital signals. *Id.* at 5:19–23. Computers 14 in the mailroom allow information from the scanners to be directed to particular departments, depending on the information in the documents. *Id.* at 6:26–29. As depicted in Figure 1, using local area network (LAN) 20, input from scanners 12 can be distributed to departments 30, 40, and 50. “In addition to hospital records, medical claims could be directed electronically from scanners at a hospital to a medical claim office.” *Id.* at 12:14–16. Data directed to department 30 via LAN 20 is received by LAN server 32 and transmitted to workstations within department 30 via department LAN 39. *Id.* at 6:58–61, 7:14–16. Workstations may have different tasks in processing the data. For example, workstations 34 may be data input stations, where operators view the image of the document and enter data into a predetermined form. *Id.* at

7:27–34. The record, including the image and input data, is then sent to server 32, which then sends the record to workstation 35, where the claim is analyzed and payment is determined. *Id.* at 7:38–46. Operators can pass the record to supervisor workstation 36 if a question arises in the analysis. *Id.* at 7:46–49. Upon completion of the transaction at workstation 35 or 36, “LAN 39 also transmits the results of transactions performed at those workstations to server 32 and back onto LAN 20 for distribution to other departments, to an archive arrangement 60 or a mainframe computer 70.” *Id.* at 6:37–40, 8:27–32.

B. Claims 30, 36, and 42

Petitioners argue that Lech discloses the limitation of claim 30, which recites the “method as recited in claim 27, wherein the first networked component comprises a mainframe computer.” Pet. 75–76 (citing Ex. 1001 ¶ 67; Ex. 1009, 1:34–39, 5:29–32, 5:55–56). Petitioners assert that it would have been obvious “to implement the ‘computer application unit’ for an accounting department using a *mainframe computer*, because mainframe computers were the principal if not exclusive systems used by accounting departments at the time to store financial information,” and thus, “to apply the teachings of Lech in a way that the *first networked component comprises a mainframe computer*.” *Id.* at 76 (citing Ex. 1001 ¶ 68).

Petitioners additionally argue that Lech discloses all the elements of claim 27 and that Beizer teaches the limitation of claim 30. Pet. 76–77 (citing Ex. 1010, 6:37–40, 9:58–10:13, 11:6–10, 12:11–14, Fig. 1). Petitioners contend that Beizer teaches or suggests that “a mainframe may be one of the networked components.” *Id.* at 77 (citing Ex. 1010, 6:37–40); *see also* Ex. 1010, 6:37–40 (stating “LAN 39 also transmits the results of

transactions performed at those workstations to server **32** and back onto LAN **20** for distribution to other departments, to an archive arrangement **60** or a mainframe computer **70**”).

Petitioners also contend that Lech discloses all the elements of claim 27 and Beizer teaches or suggests the limitations of claim 36, which recites the “method as recited in claim 27, wherein the unitary data stream comprises an insurance claim form.” Pet. 78. Petitioners assert that Beizer refers to “insurance claim processing companies” and teaches that “medical claims could be directed electronically from scanners at a hospital to a medical claim office.” *Id.* (citing Ex. 1001 ¶ 92; Ex. 1010, 1:12, 12:14–16).

Petitioners further contend that Lech discloses all the elements of claim 42 and Beizer also teaches or suggests “a server having specialized software for causing the server to perform a process,” as recited in the preamble of claim 42. Pet. 78. Petitioners assert that Beizer teaches using software to “associate various lines of information on the document with entry lines in the form” and that the process “may take place either at computer 14 on the company LAN, the departmental server 32, or the workstation itself.” *Id.* at 78–79 (citing Ex. 1010, 7:67–8:1, 8:3–5). Petitioners argue that modifying the computer of Lech with the server of Beizer would be a simple substitution. *Id.* at 79.

In addition, Petitioners argue that “it would have been common sense to combine Lech and Beizer” because both are “directed to very similar subject matter in the same field of invention.” Pet. 74 (citing Ex. 1009, 1, 2:29–34; Ex. 1010, 1, 1:7–10; Ex. 1020, 2; Ex. 1021, 1). Petitioners also argue that “a person of skill in the art would have been motivated to combine Beizer and Lech based on simple substitution of one known

element to obtain predictable results.” *Id.* (citing Ex. 1001 ¶ 88; Ex. 1009, 2:15–19). Petitioners further assert that the substitution of Lech’s networked elements for a mainframe computer “would have achieved the predictable result that the extracted data would be archived.” *Id.* at 74. Petitioners additionally assert that the combination of Beizer and Lech would have been obvious “because Beizer discloses a very similar process involving a mainframe computer for this purpose.” *Id.* (citing Ex. 1010, 6:40). Petitioners further contend that the substitution of Lech’s documents for the insurance claim forms disclosed in Beizer would be a simple substitution and that Lech states that “other types of hard copy documents can be processed by the invention.” *Id.* at 74–75 (citing Ex. 1009, 15:50–52). Petitioners finally assert that it would have been obvious to try, because Lech teaches processing in general and a person of ordinary skill would look to Beizer to implement its invention for the healthcare industry. *Id.* at 75 (citing Ex. 1001 ¶ 90).

Patent Owner responds that, because Petitioners failed to show all elements of claims 27 or 42 are disclosed in Lech or Beizer, claims 30 and 36, which depend from claims 27 or 42, are not rendered obvious in view of Lech and Beizer. PO Resp. 69. For reasons previously discussed, Petitioners persuade us that Lech discloses the elements of claims 27 and 42. We also find that Lech and Beizer teach or suggest the limitations of claims 30, 36, and 42, as asserted by Petitioners. Pet. 75–79.

Patent Owner also responds that Petitioners’ rationale for combining Lech and Beizer to arrive at claim 42 is inadequately supported by expert testimony. PO Resp. 64–65 (citing Pet. 79). However, Petitioners contend, and we agree, that Beizer teaches that a “form building process may take

place either at computer 14 on the company LAN, the departmental server 32 or at the workstation itself.” Pet. 78–79; Ex. 1010, 8:3–5. Beizer evidences that either a computer or a server can complete a form building process, and thus, indicates that a server is a substitute for a computer in such an application. The record does not indicate that substituting a server for a computer would have been beyond the level of ordinary skill in the art or the results of such a substitution would not have been predictable by one of ordinary skill in the art.

Therefore, for the reasons discussed above, we determine that Petitioners have shown by a preponderance of the evidence that claims 30, 36, and 42 are rendered obvious by Lech and Beizer.

VII. CONCLUSION

For the foregoing reasons, we determine that Petitioners have demonstrated, by a preponderance of the evidence, that claims 27, 30, 36, 42–45, and 49–52 of the ’020 patent are unpatentable under 35 U.S.C. § 101; claims 27, 42–45, and 49–52 are unpatentable under 35 U.S.C. § 102; and that claims 30, 36, and 42 are unpatentable under 35 U.S.C. § 103.

VIII. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 27, 30, 36, 42–45, and 49–52 of U.S. Patent No. 7,178,020 B2 have been shown to be unpatentable; and

FURTHER ORDERED that this is a Final Decision. Parties to the proceeding seeking judicial review of the decision must comply with the

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notice and service requirements of 37 C.F.R. § 90.2.

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