United States Court of Appeals for the Federal Circuit

IN RE: JEFFREY A. KILLIAN,
Appellant

2021-2113

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 14/450,042.

Decided: August 23, 2022

BURMAN YORK MATHIS, III, Law Office of Burman Y. Mathis, Harper's Ferry, VA, argued for appellant.

MONICA BARNES LATEEF, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Katherine K. Vidal. Also represented by MARY L. KELLY, THOMAS W. KRAUSE, AMY J. NELSON, FARHEENA YASMEEN RASHEED.

Before TARANTO, CLEVENGER, and CHEN, *Circuit Judges*.

CHEN, *Circuit Judge*.

Jeffrey A. Killian appeals from the decision of the Patent Trial and Appeal Board (Board) affirming the examiner's rejection of claims 1, 5–8, 12–15, 19, 20 and 22 (all pending claims) of U.S. Patent Application No. 14/450,042 ('042 application) under 35 U.S.C. § 101. *See Ex Parte*

Jeffrey A. Killian, No. 2020-003680, 2021 WL 363335 (P.T.A.B. Feb. 1, 2021). We affirm.

BACKGROUND

The '042 application relates to a system and method "for determining eligibility for Social Security Disability Insurance [SSDI] benefits through a computer network." J.A. 45 ¶ 2. This process entails looking up information from two sources: (1) a Federal Social Security database; and (2) a State database containing records for patients receiving treatment for developmental disabilities or mental illness. J.A. 47 ¶¶ 11–12. For those patients identified in the State database as meeting certain criteria but not currently receiving SSDI benefits, the method uses relevant information to determine if a given patient is entitled to receive SSDI benefits. J.A. 47–48 ¶¶ 12–13. The specification explains that once the relevant information is on hand, "the automated system seamlessly carries out the process of determining who is eligible for SSDI and who is not, which frees up assigned staff to perform more traditional duties." J.A. 67 ¶ 117.

Claim 1 is representative[1]:

> A computerized method for determining overlooked eligibility for social security disability insurance (SSDI)/adult child benefits through a computer network, the method comprising the steps of:
>
> > (a) providing a computer processor and a computer readable media;

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[1] The Board treated claim 1 as representative. *See Ex Parte Jeffrey A. Killian*, No. 2020-003680, 2021 WL 1784797, at *2, *5 (P.T.A.B. May 3, 2021) (denying reconsideration); *Killian*, 2021 WL 363335, at *4. On appeal, Mr. Killian does not argue that it erred in doing so.

(b) providing access to a Federal Social Security database through the computer network, wherein the Federal Social Security database provides records containing information relating to a person's status of SSDI adult child benefits and/or parental and/or marital information relating to SSDI adult child benefit eligibility;

(c) providing access to a State database through the network, wherein the State database provides records containing information relating to persons receiving treatment for developmental disabilities and/or mental illness from a State licensed care facility;

(d) selecting at least one person from the State database who is identified as receiving treatment for developmental disabilities and/or mental illness;

(e) creating an electronic data record comprising information relating to at least the identity of the person and social security number, wherein the electronic data record is recorded on the computer readable media;

(f) retrieving the person's Federal Social Security record containing information relating to the person's status of SSDI adult child benefits through the network;

(g) determining whether the person is receiving SSDI adult child benefits based on the SSDI status information contained within the Federal Social Security database record through the computer network;

(h) indicating in the electronic data record whether the person is receiving SSDI adult child benefits or is not receiving SSDI adult child benefits;

for at least one electronic data record of persons indicated as not receiving SSDI adult child benefits, comprising the steps of:

(a) providing a caseworker display system;

(b) generating a data collection input screen display to the caseworker display system relating to the electronic data record of persons indicated as not receiving SSDI adult child benefits;

(c) caseworker identifying and inputting parental and/or marital names and Social Security numbers into the electronic data record of the person indicated in the electronic data record as not receiving SSDI adult child benefits;

(d) retrieving parental and/or marital Social Security record(s) from the Federal Social Security database through the computer network in order to identify information for determining eligibility for SSDI adult child benefits;

(e) determining whether the person indicated in the electronic data record is eligible for receiving SSDI adult child benefits based on the identified information for determining eligibility of SSDI adult child benefits and current SSDI benefit legal requirements; and

(f) indicating in the electronic data record whether the person is eligible for SSDI

> adult child benefits or is not eligible for SSDI adult child benefits.

J.A. 30–31.

The examiner rejected all pending claims of the '042 application under § 101, finding that they were directed to the abstract idea of "determining eligibility for social security disability insurance . . . benefits" and lacked additional elements amounting to significantly more than the abstract idea because the additional elements were simply generic recitations of generic computer functionalities. J.A. 89. Mr. Killian appealed to the Board, which affirmed the examiner's rejection and designated its affirmance as a new ground for rejection under 37 C.F.R. § 41.50(b). *Killian*, 2021 WL 363335, at *1. The Board found that the claims are directed to the patent-ineligible abstract idea of "a search algorithm for identifying people who may be eligible for SSDI benefits they are not receiving." *Id.* at *6. It determined that the essential steps recited by claim 1—the "selecting" and "determining" limitations[2]—can be

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[2] More specifically, the essential steps identified by the Board are:

> (d) selecting at least one person from the State database who is identified as receiving treatment for developmental disabilities and/or mental illness;
>
> (g) determining whether the person is receiving SSDI adult child benefits based on the SSDI status information contained within the Federal Social Security database record . . .;

performed in the human mind and are thus "an abstract mental process." *Id.* at *6–7. It then found that the remaining steps were merely directed to data gathering or data output and were therefore appropriately categorized as "insignificant extra-solution activity" or "primitive computer operations found in any computer system" "which do not integrate the processes into a 'practical application,' and which do not recite an 'inventive concept.' " *Id.* at *8–9.

The Board denied Mr. Killian's request for rehearing. *Killian*, 2021 WL 1784797, at *6.

Mr. Killian appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

Patent eligibility under § 101 is a question of law that may implicate underlying issues of fact. *In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1159 (Fed. Cir. 2018) (citing *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335,

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> for at least one . . . data record of persons indicated as not receiving SSDI adult child benefits, comprising the steps of:
>
> > (c) caseworker identifying . . . parental and/or marital names and Social Security numbers . . . of the person . . .;
> >
> > (e) determining whether the person indicated in the . . . data record is eligible for receiving SSDI adult child benefits based on the identified information for determining eligibility of SSDI adult child benefits and current SSDI benefit legal requirements.

Killian, 2021 WL 363335, at *6.

1342 (Fed. Cir. 2018)). We review the Board's ultimate conclusion on patent eligibility de novo. *Id.* We review any underlying factual findings for substantial evidence. *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1362 (Fed. Cir. 2020).

Section 101 provides "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of" Title 35 of the United States Code. The Supreme Court has long held that "[l]aws of nature, natural phenomena, and abstract ideas are not patentable" under § 101. *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

In *Alice*, 573 U.S. at 218, and *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 77–78 (2012), the Supreme Court explicated a two-step test for determining whether claimed subject matter falls within one of the judicial exceptions to patent eligibility. First, we "determine whether the claims at issue are directed to a patent-ineligible concept," such as an abstract idea. *Alice*, 573 U.S. at 218. Second, if the claims are directed to a patent-ineligible concept, we "examine the elements of the claim to determine whether it contains an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application." *Id.* at 221 (internal quotation marks omitted) (quoting *Mayo*, 566 U.S. at 72, 80).

The claims of the '042 application do not pass this threshold test. As the Board found, they are directed to the patent-ineligible abstract mental process of "a search algorithm for identifying people who may be eligible for SSDI benefits they are not receiving." *See Killian*, 2021 WL 363335, at *6.

We have held that mental processes are abstract ideas under *Alice*/*Mayo* step one. *See, e.g.*, *CyberSource Corp. v.*

Retail Decisions, Inc., 654 F.3d 1366, 1373 (Fed. Cir. 2011) ("[C]omputational methods which can be performed *entirely* in the human mind are the types of methods that embody the 'basic tools of scientific and technological work' that are free to all men and reserved exclusively to none." (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)); *see also Elec. Power Grp., LLC v. Alstom, S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) ("[W]e have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category." (citations omitted)). That is, where the "focus of the claimed advance over the prior art" shows that "the claim's 'character as a whole' is directed to" steps that "can be performed in the human mind, or by a human using a pen and paper" the claim is for a patent-ineligible abstract idea. *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp.*, 830 F.3d at 1353) (other citations omitted); *CyberSource*, 654 F.3d at 1372.

The thrust of the '042 application's representative claim 1 is the collection of information from various sources (a Federal database, a State database, and a caseworker) and understanding the meaning of that information (determining whether a person is receiving SSDI benefits and determining whether they are eligible for benefits under the law). *See* J.A. 38–39. The Board correctly concluded that "[t]hese steps can be performed by a human, using 'observation, evaluation, judgment, [and] opinion,' because they involve making determinations and identifications, which are mental tasks humans routinely do." *Killian*, 2021 WL 363335, at *6 (citation omitted).

That these steps, with the exception of the step of the caseworker obtaining additional information, are performed on a generic computer does not save the claims from being directed to an abstract idea. We have distinguished between claims "directed to an improvement in the

functioning of a computer," versus those, like the claims at issue here, that simply recite "generalized steps to be performed on a computer using conventional computer activity." *See In re TLI Commc'ns LLC Pat. Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016) (quoting *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1338 (Fed. Cir. 2016)).

We have found similar claims pertaining to data gathering, analysis, and notification on generic computers to be directed to abstract ideas at *Alice*/*Mayo* step one. For example, in *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016), we held that claims directed to collecting information on access to a patient's personal health information, analyzing that information to detect indicia of improper access, and notifying a user if improper access had occurred were directed to a "mental process within the abstract idea category." In *Electric Power Group*, we held that claims for a method of detecting events on an interconnected power grid with steps reciting receipt of data from various sources, interpretation of that data, and display of the results were directed to an abstract idea. *Elec. Power Grp.*, 830 F.3d at 1351–54. So too, here, Mr. Killian's claims must fail *Alice*/*Mayo* step one as they are directed to collection of information, comprehending the meaning of that collected information, and indication of the results, all on a generic computer network operating in its normal, expected manner. As the application's specification suggests, nothing technical exists in the nature of these steps; they could be performed by a person reading and comprehending the meaning of the recited information. J.A. 67 ¶ 117 (stating that invention "frees up assigned staff to perform more traditional duties").

At *Alice*/*Mayo* step two, we agree with the Board that there is no inventive concept to be found in the '042 application's claims. A claim does not pass muster at step two by "[s]tating an abstract idea while adding the words 'apply it with a computer.' " *Alice*, 573 U.S. at 223. The additional steps in representative claim 1 do no more than instruct

the practitioner to perform the abstract steps of gathering information, determining if a person is receiving benefits or is eligible for benefits under the law, and displaying the results of that analysis, all on a generic computer. As in *Electric Power Group*, 830 F.3d at 1355, the claims here do not detail how the computer should go about determining eligibility for benefits, beyond saying that the computer should determine eligibility based "on the identified information" and "current SSDI benefit legal requirements." J.A. 31. That is, the claims require comparing information against eligibility requirements—the same process that humans seeking to determine benefit eligibility must follow either with or without a computer. *See FairWarning*, 839 F.3d at 1095.

Mr. Killian raises myriad arguments on appeal. Most of his arguments are directed not to the specifics of the claims of the '042 application but to the corpus of § 101 jurisprudence.

A

Mr. Killian first argues that the standard promulgated in *Alice* and *Mayo* is indefinite—so poorly defined that it renders all court and Board decisions finding a claim patent ineligible under the *Alice*/*Mayo* standard arbitrary and capricious under the Administrative Procedure Act (APA), 5 U.S.C. § 706(2)(A), and the Due Process Clause of the Fifth Amendment. Appellant's Br. 20–22, 26–29. He seeks "a single non-capricious definition or limiting principle" to replace the allegedly vague terms "abstract idea" and "inventive concept" used in *Alice* and *Mayo*. Appellant's Reply Br. 5–7. After the Supreme Court's decision in *Dobbs v. Jackson Women's Health Organization*, 142 S. Ct. 2228 (2022), Mr. Killian submitted a supplemental filing arguing that, under that case, the Supreme Court's § 101 jurisprudence as expounded in *Alice*; *Mayo*; *Bilski v. Kappos*, 561 U.S. 593 (2010); *Parker v. Flook*, 437 U.S. 584 (1978); and *Benson* are "mere policy preferences" that

"stand on exceptionally weak constitutional grounds" and should be reconsidered. Citation of Supplemental Authority, ECF No. 37. We do not find Mr. Killian's arguments persuasive.

We first address Mr. Killian's assertion that our own decisions applying the *Alice*/*Mayo* standard are somehow improper under the APA. As a preliminary matter, we note that the standards of review established in the APA, 5 U.S.C. § 706, do not apply to decisions by courts, such as our own. The APA governs judicial review of "agency action." 5 U.S.C. § 704. Courts are not "agencies" under that statute. 5 U.S.C. § 701(b)(1)(B).

Although Mr. Killian alludes to Fifth Amendment Due Process Clause violations stemming from the alleged imprecision of the *Alice*/*Mayo* standard, he never argues that the standard runs afoul of the void-for-vagueness doctrine. Nor could he, as vagueness *as applied to the particular case* is a prerequisite to establishing facial vagueness. *Bowling v. McDonough*, 38 F.4th 1051, 1061 (Fed. Cir. 2022). While there are close cases under the *Alice*/*Mayo* standard, the '042 application does not present such a close case—as we have already explained, the claims of the '042 application are clearly patent ineligible in view of our precedent. We conclude that Mr. Killian has not shown that our decisions applying the *Alice*/*Mayo* standard are improper.

We turn now to Mr. Killian's allegation that all Board decisions finding a claim patent ineligible under the *Alice*/*Mayo* standard are arbitrary and capricious under the APA. Board final decisions are reviewable under the APA. 5 U.S.C. § 704; 35 U.S.C. § 141(a). At heart, Mr. Killian attacks the Supreme Court's interpretation of § 101, which it determined includes an implicit exception, as well as the common law standard promulgated by the Court under that interpretation—arguing that the vagueness of those decisions has led to arbitrary and capricious agency decision making. But, as we have already explained, the APA

does not empower us to review decisions of "the courts of the United States" because they are not agencies. 5 U.S.C. § 701(b)(1)(B). We may not turn the "arbitrary and capricious" standard of the APA back onto the Supreme Court or our own court. As we have already done for the claims of the '042 application, we review de novo the Board's legal determinations under § 101 and the judicial exceptions in individual cases for compliance with the statute and judicial precedent. *See Customedia*, 951 F.3d at 1362. And we review any factual findings by the Board for substantial evidence. *Id.* But we may not announce that the Board acts arbitrarily and capriciously merely by applying binding judicial precedent, as urged by Mr. Killian.

We turn next to Mr. Killian's desire for "a single non-capricious definition or limiting principle" for "abstract idea" and "inventive concept." Appellant's Reply Br. 5–7. As to the abstract idea exception, no single, hard-and-fast rule that automatically outputs an answer in all contexts exists because there are different types of abstract ideas, including (1) methods of organizing human activity, such as "fundamental economic practice[s]," *see, e.g.*, *Alice*, 573 U.S. at 220–21; *Bilski*, 561 U.S. at 611; (2) claims to mental processes, even if performed on a computer rather than in the human mind, *see, e.g.*, *Benson*, 409 U.S. at 67, 71–72; and (3) claims to results rather than to a means of achieving the claimed result, *see, e.g.*, *Interval Licensing*, 896 F.3d at 1345.

Although there is no single, inflexible rule for the abstract idea inquiry, our court has provided guidance as to what constitutes an abstract idea. We have explained that, first, "[t]he 'abstract idea' step of the inquiry calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter." *Affinity Labs*, 838 F.3d at 1257 (quoting *Elec. Power Grp.*, 830 F.3d at 1353) (other citations omitted). Once we identify the "focus of the asserted claims," we may consider whether the claims "fall

into a familiar class of claims 'directed to' a patent-ineligible concept." *See Elec. Power Grp.*, 830 F.3d at 1353.

We have provided still further guidance for those "familiar class[es] of claims." *See id.* For example, in the context of claims to results, we have explained that claims that "simply demand[] the production of a desired result . . . without any limitation on how to produce that result" are directed to an abstract idea. *Interval Licensing*, 896 F.3d at 1345. In the context of mental processes, such as that claimed by the '042 application, we have explained that if a claim's steps "can be performed in the human mind, or by a human using a pen and paper," and the elements in the claim do not contain a sufficient inventive concept under *Alice*/*Mayo* step two, the claim is for a patent-ineligible abstract idea. *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1327 (Fed. Cir. 2020) (quoting *CyberSource*, 654 F.3d at 1372). And we have explained that "[i]nformation as such is an intangible"; accordingly, "gathering and analyzing information of a specified content, then displaying the results" without "any particular assertedly inventive technology for performing those functions" is an abstract idea. *Elec. Power Grp.*, 830 F.3d at 1353–54. We have provided further guidance for "cases involving software innovations," where the abstract idea "inquiry often turns on whether the claims focus 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.' " *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1303 (Fed. Cir. 2018) (quoting *Enfish*, 822 F.3d at 1335–36).

Our case law also provides guidance as to "inventive concept," particularly in the context of claims for computer implementations of abstract ideas. We have explained that claims for methods that "improve[] an existing technological process" include an inventive concept at step two. *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350–51 (Fed. Cir. 2016) (quoting *Alice*, 573

U.S. at 221, 223). And claims that "recite a specific, discrete implementation of the abstract idea" rather than "preempt[ing] all ways of" achieving an abstract idea using a computer may include an inventive concept. *Id.* at 1350. But claims to "an abstract idea implemented on generic computer components, without providing a specific technical solution beyond simply using generic computer concepts in a conventional way" do not pass muster at step two. *Id.* at 1352. "Neither 'attempting to limit the use of [the idea] to a particular technological environment' nor a 'wholly generic computer implementation' is sufficient." *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1354 (Fed. Cir. 2014) (quoting *Alice*, 573 U.S. at 222, 223).

Even if we were persuaded by Mr. Killian's argument that the *Alice*/*Mayo* framework is insolubly unclear, both this court and the Board would still be bound to follow the Supreme Court's § 101 jurisprudence as best we can as we must follow the Supreme Court's precedent unless and until it is overruled by the Supreme Court. *See Rodriguez de Quijas v. Shearson/Am. Exp., Inc.*, 490 U.S. 477, 484 (1989).

B

Mr. Killian argues that comparing his case to other cases in which this court and the Supreme Court considered issues of patent eligibility under § 101 violates his due process rights because he had no opportunity to appear in those other cases. Appellant's Br. 64–66. We disagree.

Examination of earlier cases "is the classic common law methodology for creating law when a single governing definitional context is not available." *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (citing Karl N. Llewellyn, The Common Law Tradition: Deciding Appeals (1960)). Indeed, the Supreme Court has decided cases arising under § 101 through comparison to its prior opinions. *Alice*, 573 U.S. at 221 ("[W]e need not labor to delimit the precise contours of the 'abstract ideas'

category in this case. It is enough to recognize that there is no meaningful distinction between the concept of risk hedging in *Bilski* and the concept of intermediated settlement at issue here."); *Bilski*, 561 U.S. at 609 ("Rather than adopting categorical rules that might have wide-ranging and unforeseen impacts, the Court resolves this case narrowly on the basis of this Court's decisions in *Benson*, *Flook*, and *Diehr*, which show that petitioner's claims are not patentable processes because they are attempts to patent abstract ideas."). In this case, nothing stops Mr. Killian from identifying any important distinctions between his claimed invention and claims we have analyzed in prior cases.

C

Mr. Killian next argues that the search for an "inventive concept" at the second step of the *Alice*/*Mayo* framework is improper because Congress did away with an "invention" requirement when it enacted the Patent Act of 1952. Appellant's Br. 28–36. This argument is unpersuasive, because, as an initial matter, Mr. Killian has not even established the premise of his argument that "inventive concept" is the same thing as the "invention" requirement which he attributes to *Hotchkiss v. Greenwood*, 52 U.S. (11 How.) 248, 267 (1850). Unlike *Hotchkiss*, our *Alice*/*Mayo* precedent has never required, for an inventive concept inquiry, an examination of whether the "degree of skill and ingenuity" expressed in the claimed invention is beyond that possessed by one or ordinary skill in the art. *See id.* Furthermore, the Supreme Court has instructed that we are required, at step two, to look for an inventive concept. *Alice*, 573 U.S. at 217–18 ("We have described step two of this analysis as a search for an 'inventive concept.' " (quoting *Mayo*, 566 U.S. at 72–73)). And, thus, search for an inventive concept we must. *See Rodriguez de Quijas*, 490 U.S. at 484.

D

Similarly, Mr. Killian argues that the "mental steps" doctrine has no foundation in modern patent law. Appellant's Br. 46, 57–59. He asserts that, in *Diamond v. Diehr*, 450 U.S. 175 (1981), and *Bilski*, the Supreme Court repudiated that doctrine. Appellant's Br. 46. This argument is plainly incorrect.

The Supreme Court has long held that mental steps fall within the patent-ineligible category of abstract ideas. For example, in *Benson*, the Supreme Court found ineligible claims directed to the conversion of binary-coded decimal numerals to pure binary numerals that "can be done mentally," even though "[t]he method sought to be patented varies the ordinary arithmetic steps a human would use." *Benson*, 409 U.S. at 67, 71–72. In *Mayo*, the Supreme Court more recently reiterated the judicial-exception standard from *Benson* that "[p]henomena of nature, though just discovered, *mental processes*, and abstract intellectual concepts are not patentable." *Mayo*, 566 U.S. at 71 (emphasis added) (quoting *Benson,* 409 U.S. at 67).

The Supreme Court did not hold in *Diehr*, *Bilski*, or any other case that "steps performed in a computer are not 'mental steps' even if the steps performed in the computer are identical to steps that could theoretically be performed by a human mind," as Mr. Killian contends. Appellant's Br. 46. In *Diehr*, the Supreme Court held that claims directed to a process for curing synthetic rubber that incorporated steps using a mathematical formula and a digital computer were patent eligible. *Diehr*, 450 U.S. at 177, 192–93. And the disagreement between the majority and the dissent was not over the status and scope of the mental steps doctrine, but over the essence of the claimed invention in the patent at issue. *Compare id.* at 193–94 (majority opinion), *with id.* at 205 (Stevens, J., dissenting). The majority described the claimed invention as "a process for curing synthetic rubber," *id.* at 177 (majority opinion),

while the dissent viewed the invention as "a method of using a digital computer to determine the amount of time that a rubber molding press should remain closed during the synthetic rubber-curing process," *id.* at 208 (Stevens, J., dissenting). At bottom, *Diehr* did not comment on or overrule the mental steps doctrine. Nor has Mr. Killian pointed to any statement in *Bilski* that undermines a mental process as one of the judicial exceptions; after an independent review, we find nothing in that opinion to that effect.

Further, we are bound by our precedential decisions holding that steps capable of performance in the human mind are, without more, patent-ineligible abstract ideas. *See, e.g.*, *Elec. Power Grp.*, 830 F.3d at 1355 ("[M]erely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas."); *In re Comiskey*, 554 F.3d 967, 979 (Fed. Cir. 2009) ("[M]ental processes—or processes of human thinking—standing alone are not patentable even if they have practical application."); *see also CyberSource*, 654 F.3d at 1372.

E

Mr. Killian argues that whether a claimed process is well-understood, routine, and conventional is necessarily a factual inquiry requiring the finder of fact to consult all evidence in the record. Appellant's Br. 23. He refers to fifty-five documents allegedly before the examiner and Board that he claims provide evidence of the patent eligibility of the '042 application's claims. *Id.* at 12; Appellant's Reply Br. 12. And he asserts that the Patent and Trademark Office adjudges everything in its § 101 decisions "in an evidentiary vacuum" and that "[t]here is no substantial evidence on the record to support the present rejection." Appellant's Br. 63.

But as the Board in this case properly found, substantial evidence from Mr. Killian's application supports its finding that the additional elements of representative claim 1 do not add "a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which would be considered 'something more' than the judicial exception." *Killian*, 2021 WL 363335, at *9. Specifically, the Board found that the additional elements of claim 1—beyond the abstract idea of determining entitlement to certain SSDI benefits—are "providing a computer processor and a computer readable media" and various references throughout the claim indicating that the steps are intended to be performed on a computer, such as "through the computer network," "providing a caseworker display system," and "electronic (data record)." *Id.* at *8. The Board, quoting the '042 application's specification, found that the claimed method "may be performed by any suitable computer system." *Id.* at *8 (quoting J.A. 52 ¶ 42 and citing J.A. 52 ¶ 41). The Board explained that the "operations of storing, analyzing, receiving, and writing data are primitive computer operations found in any computer system." *Id.* (citing *In re Katz Interactive Call Processing Pat. Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011)).

As the Supreme Court has explained, generic computer functions, performed on, as the application itself admits, any generic computer, do not provide an inventive concept. *Alice*, 573 U.S. at 223–24 ("[W]holly generic computer implementation is not generally the sort of 'additional featur[e]' that provides any 'practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.' " (quoting *Mayo*, 566 U.S. at 77)). Further, "[m]erely requiring the selection and manipulation of information—to provide a 'humanly comprehensible' amount of information useful for users, . . . by itself does not transform the otherwise-abstract processes of information collection and analysis." *Elec. Power Grp.*, 830

F.3d at 1355. Thus, the requirements of the '042 application's claims that a generic computer perform steps of "creating an electronic data record," "indicating in the electronic data record whether the person is receiving SSDI adult child benefits," "providing a caseworker display system," "generating a data collection input screen," "indicating in the electronic data record whether the person is eligible for SSDI adult child benefits," and similar generic data tasks are not a transformative inventive concept.

Because the '042 application's specification admits that the computer, which the Board correctly identified as the additional element of the claims, is well-understood, routine, and conventional, no further evidence is needed. *See Berkheimer v. HP Inc.*, 890 F.3d 1369, 1371 (Fed. Cir. 2018) (Moore, J., concurring in denial of rehearing en banc) ("Relying on the specification alone may be appropriate where, as in *Mayo*, the specification *admits* as much." (citing *Mayo*, 566 U.S. at 79)).

Finally, while Mr. Killian refers, rather obliquely, to fifty-five documents allegedly presented to the examiner and the Board, Mr. Killian does not explain on appeal what specifically these fifty-five documents show, nor did he include them in the joint appendix. In his opening brief, Mr. Killian said about these documents only that "there are fifty-five separate documents of unquestioned veracity and efficacy entered into evidence that support Appellant's position." Appellant's Br. 12. We find that Mr. Killian forfeited any argument on appeal based on those fifty-five documents by failing to present anything more than a conclusory, skeletal argument. *See SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1320 (Fed. Cir. 2006) (explaining that a party forfeits undeveloped arguments on appeal).

CONCLUSION

We have considered Mr. Killian's remaining arguments and find them unpersuasive. For the foregoing reasons, we affirm the Board's decision.

AFFIRMED