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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* JONATHAN M. HARMON,  
ATUL KUMAR, RUSSELL G. OLSEN, and MATT T. WESTFALL

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Appeal 2020-000074  
Application 15/045,475  
Technology Center 3600

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Before MICHAEL J. STRAUSS, MICHAEL J. ENGLE, and  
SCOTT RAEVSKY, *Administrative Patent Judges*.

ENGLE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1–6, 8–16, and 18–20, which are all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies International Business Machines Corp. as the real party in interest. Appeal Br. 2.

## TECHNOLOGY

The application relates to analyzing a patient’s electronic medical records (EMRs). Spec. Abstract. Medical services provided to a patient are recorded in the patient’s records using a medical code, such as a particular diabetes treatment being recorded with the code “L5000.” *See id.* ¶¶ 18–19. If a medical provider “continues to treat the patient the following year” and repeats the same medical code (“L5000”), the Specification refers to this as “re-coding.” *Id.* ¶ 19. Some conditions, such as type 2 diabetes, are “an ongoing medical malady that will persist from one year to the next” and “need to be re-coded from time to time by the doctor” (e.g., regular doctor visits to evaluate the patient’s diabetes). *Id.* ¶ 22. However, Medicare and other insurance providers may have guidelines stating that doctors will only be paid once per calendar year for treatment of a patient with type 2 diabetes. *Id.* Thus, “a patient that has been previously coded as having type 2 diabetes should be checked for re-coding every calendar year,” but such re-coding should not be done more than once per year. *Id.* The claimed invention therefore provides a notification if, for example, a patient’s records show that the patient received diabetes treatment two years ago but has not received diabetes treatment within the past year.

## ILLUSTRATIVE CLAIM

Claim 1 is illustrative and reproduced below with certain limitations at issue emphasized:

1. A method, in a data processing system comprising at least one processor and a memory comprising instructions which, when executed by the at least one processor, causes the at least one processor to implement a medical code re-coding system, the method comprising:

analyzing, by a patient EMRs analysis engine of the medical code re-coding system, a patient medical record corresponding to a patient, to identify at least one previous occurrence of a medical code associated with a medical malady of the patient in the patient medical record that has not been re-coded in a current time period of the patient medical record;

applying, by a re-coding rules engine of the medical code re-coding system, at least one medical code re-coding rule corresponding to the at least one previous occurrence of the medical code to the patient medical record, wherein *applying at least one medical code re-coding rule corresponding to the at least one previous occurrence of the medical code to the patient medical record comprises:*

*determining, by the re-coding rules engine, whether the medical code is present in one or more entries in the patient medical record within a specified time period prior to the current time period; and*

*determining, by the re-coding rules engine, that the medical code is a candidate for re-coding in a current time period in response to the medical code not being present in any of the entries in the patient medical record within the specified time period;*

determining, by the re-coding rules engine, based on results of the application of the at least one medical code re-coding rule, whether the medical code is a candidate for re-coding in the current time period; and

outputting, by a re-coding alert/notification engine of the medical code re-coding system, a notification of the medical code being a candidate for re-coding in the current time period in response to the determination indicating that the medical code is a candidate for re-coding in the current time period.

## REFERENCES

The Examiner relies on the following prior art references:

Ghouri	US 2016/0357910 A1	Dec. 8, 2016
Levine	US 2003/0225597 A1	Dec. 4, 2003
Sporleder	US 2015/0254407 A1	Sept. 10, 2015

## REJECTIONS

Claims 1–6, 8–16, and 18–20 stand rejected under 35 U.S.C. § 101 as directed to an abstract idea without significantly more. Final Act. 2.

Claims 1–3, 5, 6, 8–13, 15, 16, and 18–20 stand rejected under 35 U.S.C. § 103 as obvious over Sporleder and Ghouri. Final Act. 7.

Claims 4 and 14 stand rejected under 35 U.S.C. § 103 as obvious over Sporleder, Ghouri, and Levine. Final Act. 18.

## ISSUES

1. Did the Examiner err in concluding that claim 1 is directed to ineligible subject matter without significantly more?
2. Did the Examiner err in finding the combination of Ghouri and Sporleder teaches or suggests the limitations of claim 1 italicized above?

## ANALYSIS

### *§ 101*

Section 101 defines patentable subject matter: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. The Supreme Court, however, has “long held that this provision contains an important implicit exception” that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Mayo*

*Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (quotation omitted). “Eligibility under 35 U.S.C. § 101 is a question of law, based on underlying facts.” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018). To determine patentable subject matter, the Supreme Court has set forth a two part test.

“First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts” of “laws of nature, natural phenomena, and abstract ideas.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014). A court must be cognizant that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas” (*Mayo*, 566 U.S. at 71), and “describing the claims at . . . a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016). Instead, “we evaluate the focus of the claimed advance over the prior art to determine if the character of the claim as a whole, considered in light of the specification, is directed to excluded subject matter.” *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1092 (Fed. Cir. 2019) (quotation omitted). “The inquiry often is whether the claims are directed to ‘a specific means or method’ for improving technology or whether they are simply directed to an abstract end-result.” *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017).

If the claims are directed to an abstract idea or other ineligible concept, then we continue to the second step and “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a

patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 79, 78). The Supreme Court has “described step two of this analysis as a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* at 217–18 (quotation omitted). However, “[t]he abstract idea itself cannot supply the inventive concept, no matter how groundbreaking the advance.” *Trading Techs.*, 921 F.3d at 1093 (quotation omitted). Moreover, “features that are not claimed are irrelevant as to step 1 or step 2 of the *Mayo/Alice* analysis.” *Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 939 F.3d 1355, 1363 (Fed. Cir. 2019).

In 2019, the U.S. Patent & Trademark Office published revised guidance on the application of § 101. USPTO, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Guidance”); USPTO, *October 2019 Update: Subject Matter Eligibility*, available at [https://www.uspto.gov/sites/default/files/documents/peg\\_oct\\_2019\\_update.pdf](https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf) (“Oct. Update”). Under that guidance, we look to the following steps to determine whether the claim recites the following items:

<b>USPTO Step</b>	<b>Does the claim recite ___?</b>	<b>MPEP §</b>
1	A process, machine, manufacture, or composition of matter	2106.03
2A, Prong 1	A judicial exception, such as a law of nature or any of the following groupings of abstract ideas: 1) Mathematical concepts, such as mathematical formulas; 2) Certain methods of organizing human activity, such as a fundamental economic practice; or 3) Mental processes, such as an observation or evaluation performed in the human mind	2106.04
2A, Prong 2	Any additional limitations that integrate the judicial exception into a practical application	2106.05(a)–(c), (e)–(h)
2B	Any additional limitations beyond the judicial exception that, alone or in combination, were not “well-understood, routine, conventional”	2106.05(d)

*See* Guidance 52, 55, 56. Under the Guidance, if the claim does not recite a judicial exception, then it is eligible under § 101 and no further analysis is necessary. *Id.* at 54. Similarly, under the Guidance, “if the claim as a whole integrates the recited judicial exception into a practical application of that exception,” then no further analysis is necessary. *Id.* at 53, 54.

Step 2A, Prong 1

Claim 1 recites in part the following:

1. A method . . . to implement a medical code re-coding system, the method comprising:

analyzing, by a patient [medical records] analysis engine of the medical code re-coding system, a patient medical record corresponding to a patient, to identify at least one previous occurrence of a medical code associated with a medical malady



of the patient in the patient medical record that has not been re-coded in a current time period of the patient medical record;

applying, by a re-coding rules engine of the medical code re-coding system, at least one medical code re-coding rule corresponding to the at least one previous occurrence of the medical code to the patient medical record, wherein applying at least one medical code re-coding rule corresponding to the at least one previous occurrence of the medical code to the patient medical record comprises:

determining, by the re-coding rules engine, whether the medical code is present in one or more entries in the patient medical record within a specified time period prior to the current time period; and

determining, by the re-coding rules engine, that the medical code is a candidate for re-coding in a current time period in response to the medical code not being present in any of the entries in the patient medical record within the specified time period;

determining, by the re-coding rules engine, based on results of the application of the at least one medical code re-coding rule, whether the medical code is a candidate for re-coding in the current time period . . . .

Thus, claim 1 recites “determining” whether a patient is due for a particular service based on “analyzing” whether the patient has received the service in the past (e.g., two years ago) but has not received the service in the most recent time period (e.g., the past year). Under the broadest reasonable interpretation, such “analyzing” and “determining” are mental processes that can be performed entirely in the human mind. *See* Guidance 52 & nn.14–15. For example, a person determining that she is due for a dental cleaning because she got a cleaning two years ago but not in the past year is performing the same basic process entirely in the human mind.

We agree with the Examiner’s analogy of claim 1 to *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016) because the claim collects data (i.e., a patient medical record) and analyzes it (i.e., identifying a medical code that occurs in the past but not the most recent past). Ans. 5. Here, as in *Electric Power*, “[t]hrough lengthy and numerous, the claims do not go beyond requiring the collection, analysis, and display of available information in a particular field, stating those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology.” *Elec. Power*, 830 F.3d at 1351. As the Federal Circuit explained in that case, “merely 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.” *Id.* at 1355. Thus, the Federal Circuit has held that “the ‘realm of abstract ideas’ includes ‘collecting information, including when limited to particular content’”; “‘analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, [which are] essentially mental processes’”; “‘merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation) . . . as an ancillary part of such collection and analysis’”; and “a combination of these abstract-idea categories.” *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (quoting *Elec. Power*, 830 F.3d at 1353). The claim here is such a combination.

Appellant argues that “to be classified as an organized human activity, the claims must be able to be wholly and reasonably performed within the human mind.” Reply Br. 15. Appellant’s argument conflates “mental processes” and “certain methods of organizing human activity,” which the Guidance treats as two separate groupings. Guidance 52. Moreover, the Federal Circuit and Guidance agree that a claim need not be performed *wholly* in the human mind to recite a mental process. *E.g., Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) (“[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.”). Instead, any non-mental steps or components are analyzed as “additional elements” beyond the abstract idea.

Thus, claim 1 recites an abstract idea under step 2A, prong 1 of the Guidance.

#### Step 2A, Prong 2

Beyond the abstract idea, claim 1 recites “outputting, by a re-coding alert/notification engine of the medical code re-coding system, a notification of the medical code being a candidate for re-coding in the current time period in response to the determination indicating that the medical code is a candidate for re-coding in the current time period.” Yet a “notification” of the result of the mental process is no different than the “display” of such a result that the Federal Circuit has repeatedly held insufficient for eligibility. *E.g., Elec. Power*, 830 F.3d at 1355 (“the claims’ invocation of computers, networks, *and displays* does not transform the claimed subject matter into patent-eligible applications” (emphasis added)); *see also* Ans. 5. Nothing

about the “notification” provides a *technological* solution, solves a *technological* problem, or otherwise improves the technology. At best, the “notification” constitutes insignificant post-solution activity that merely provides the result of the abstract mental process. See MPEP § 2106.05(g).

Claim 1 also recites that the medical records are “EMRs,” i.e., *electronic* medical records. Similarly, the preamble of claim 1 also recites that the method is “in a data processing system comprising at least one processor and a memory comprising instructions which, when executed by the at least one processor, causes the at least one processor” to implement a medical code re-coding system. Although the “re-coding system” is referred to in the body of the claim, none of the “processor”; “memory”; “instructions”; or “data processing system” are referred to again in the body of the claim, nor are they required to breathe life into the claims, and Appellant does not argue such preamble terms are limiting. Regardless, even if these preamble recitations were limiting, the Supreme Court is clear that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice*, 573 U.S. at 222–23. Similarly, the Federal Circuit has “repeatedly held that such invocations of computers . . . that are not even arguably inventive are insufficient to pass the test of an inventive concept in the application of an abstract idea.” *Elec. Power*, 830 F.3d at 1355 (quotation omitted).

The Specification further confirms that any “electronic” or computer components here are generic, not an improvement. *E.g.*, Spec. ¶¶ 33 (“These computer readable program instructions may be provided to a processor of a general purpose computer”), 44 (discussing exemplary general purpose computers).

The other claimed “engines” are part of the abstract idea and hence not an additional element *beyond* the abstract idea. *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) (“It has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.”). Yet even if we were to consider these “engine[]” limitations under prong 2 rather than prong 1, the Specification describes the “engine” as a black box software application running on a generic server. *See* Spec. ¶¶ 48 (“the memory 106 of the server 102 includes a medical code re-coding engine application 110 configured to provide a plurality of services to users via the network 130”), 50 (“although depicted together in server 102 in Figure 1, the services and functions of the medical code re-coding engine application 110 may be housed in separate physical servers, or separate virtual servers within the same server”). The preamble discussed above similarly suggests that these black box engines are merely “instructions” on a “processor.” And as discussed above, the function of that black box can be performed entirely in the human mind. Thus, at best, the “engine” merely automates an otherwise mental process without stating any *technological* improvement to the process. “The mere fact that the inventor applied coined labels to conventional structures does not make the underlying concept inventive.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017).

Although we treat the “medical code” aspect of claim 1 as part of the abstract idea under prong 1, particularly given that neither the claim nor the rest of the Specification specify any particular format for the code, even if we were to consider such limitations under prong 2, we agree with the

Examiner (Ans. 8) that “merely limiting the field of use of the abstract idea to a particular environment does not render the claims any less abstract.” *Smart Sys. Innovations, LLC v. Chi. Transit Auth.*, 873 F.3d 1364, 1373 (Fed. Cir. 2017) (quotation omitted); *see also Alice*, 573 U.S. at 223 (“limiting the use of an abstract idea to a particular technological environment” cannot transform a patent-ineligible abstract idea into a patent-eligible invention (quotation omitted)); MPEP § 2106.05(h).

The Examiner correctly points out that Appellant argues the claims are a technical improvement “without explaining what improvements, aside from the *economic* improvements of properly compensating healthcare providers, are achieved.” Ans. 4 (citing Appeal Br. 10). Merely reciting the entirety of the claim fails to specifically identify what aspect, if any, Appellant believes is a technological improvement.

Thus, claim 1 does not integrate the abstract idea into a practical application under step 2A, prong 2 of the Guidance.

### Step 2B

Appellant also argues that there is no evidence that the additional limitations were well-understood, routine, and conventional. Appeal Br. 30 (citing *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1363 (Fed. Cir. 2018); Memorandum fr. Robert W. Bahr to Patent Examining Corps, “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” (Apr. 19, 2018)). However, the Specification itself explains that “[t]hese computer readable program instructions may be provided to a processor of a general purpose computer.” Spec. ¶ 33. Similarly, the server running the engine application is described as having a generic processor (whether one or more)

with generic memory (e.g., “DRAM”) running “any operating system.” *Id.* ¶ 44; *see also id.* ¶¶ 53 (providing examples of broad categories of IBM servers), 50 (“The modules performing their respective functions for the medical code re-coding engine application 110 may be housed in the same server, on different servers, or any combination thereof.”). The Supreme Court and Federal Circuit are clear that such generic computer components were well-understood, routine, and conventional, whether alone or in combination. *Alice*, 573 U.S. at 225.

Thus, claim 1 fails to recite significantly more than the abstract idea.

#### Dependent Claims

For the dependent claims, Appellant asserts that those claims “recite additional features that clearly demonstrate the statutory nature of the claimed invention as a whole.” Appeal Br. 31. However, Appellant fails to identify any specific limitation in any dependent claim or substantively explain why it recites sufficiently more than the abstract idea of the independent claims. *Berkheimer* itself stated that “[c]ourts may treat a claim as representative in certain situations, such as if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim.” *Berkheimer*, 881 F.3d at 1365. Thus, we treat claim 1 as representative.

#### Conclusion on § 101

Accordingly, we sustain the Examiner’s § 101 rejection of claim 1, and claims 2–6, 8–16, and 18–20, which Appellant argues are patentable for similar reasons. *See* Appeal Br. 31; 37 C.F.R. § 41.37(c)(1)(iv).

§ 103

Appellant contends that the combination of Sporleder and Ghouri fails to teach or suggest the “applying” step’s “determining” sub-steps, italicized in claim 1 above. The “determining” sub-steps in turn rely on the prior “analyzing” step.

For the “analyzing” step, claim 1 recites “analyzing . . . a patient medical record . . . to identify at least one previous occurrence of a medical code associated with a medical malady . . . that has not been re-coded in a current time period of the patient medical record.”

The Examiner relies on Sporleder for this limitation. Ans. 7–8 (citing Sporleder Fig. 2).

Sporleder discloses that some medical code systems “may include a suffix that identifies the encounter level, such as by distinguishing the initial encounter from a subsequent encounter for the same condition.” Sporleder ¶ 4. Sporleder uses this distinction in determining what code should be used for a subsequent encounter. In particular, Sporleder discloses to “[d]etermine whether the diagnosis code from the prior encounter is associated with an *initial* encounter.” *Id.* at Fig. 2 (emphasis added). If the prior encounter code is not associated with an initial encounter, then Sporleder discloses to “[p]roceed without modification of the diagnosis code.” *Id.* However, if the prior encounter code is associated with an initial encounter, then Sporleder discloses to “[d]etermine whether the diagnosis code should be modified to be associated with a *subsequent* encounter.” *Id.* (emphasis added). Put another way, Sporleder teaches that if the prior encounter code was already for a *subsequent* encounter, then the next encounter can just repeat the same code, but if the prior encounter code was



for an *initial* encounter, then the next encounter should modify the code to be for a *subsequent* encounter.

For the “determining” sub-steps, claim 1 further recites “determining . . . that the medical code is a candidate for re-coding in a current time period in response to the medical code not being present in any of the entries in the patient medical record within the specified time period [prior to the current time period].” Independent claims 11 and 20 recite commensurate limitations.

The Examiner finds that “Sporleder does not expressly disclose” this limitation and instead relies on Ghouri. Final Act. 9 (citing Ghouri ¶¶ 26–41, Figs. 3, 5A, 5B, 6). Ghouri relates to “analyzing the potential for gaps in patient care and promptly providing alerts to patients and/or care providers that a gap in care may arise or may have arisen so that actions can be taken before a negative result occurs.” Ghouri ¶ 2. The Examiner finds that “Ghouri teaches analyzing a patient record to determine whether the patient has received treatment, for example via the presence of an insurance and/or diagnostic code, within a specified period of time.” Ans. 8 (citing Ghouri ¶¶ 26–41, Figs. 3, 5A, 5B, 6). Based on that finding, the Examiner determines that “[i]t would have been obvious to modify the system [of] Sporleder to incorporate displaying of the candidate codes in response to the time-based evaluation as taught by Ghouri in order to verify that the treatment protocol for a patient is in conformance with standards for a diagnosis.” *Id.* (citing Ghouri ¶ 35).

Ghouri discloses that “if data on a particular patient indicates a history of high blood pressure, the system of the present invention may be used to alert the patient periodically to the need to have their blood pressure

checked.” Ghouri ¶ 31. Thus, based on the “recommended treatment protocol,” Ghouri determines the need for “follow-up visit(s)” and a “date by which such activity(ies) should occur.” *Id.* ¶ 33. “Once the notice date arrives, an early warning gap in care alert is generated . . . .” *Id.* “The system may continue to check for whether any follow-up actions have not yet been completed” and “[i]f records indicate the patient has not completed the follow-up action a gap in care alert may be generated.” *Id.* ¶ 34.

Appellant argues that “Ghouri’s gap in care system is *notifying the user of the need to take action* and thus, since there is no current treatment being provided to the user, there would be no need to apply” the present application’s claimed invention. Appeal Br. 35–36. Further, Appellant argues “Ghouri is merely making the patient aware that *the patient needs to take action* and *is not* making the doctor or medical professional aware of the patient’s failure to take action.” *Id.* at 36.

However, Appellant’s argument is not commensurate with claim 1, which does not specify *who* must receive the alert. Appellant’s argument also does not accurately characterize Ghouri, which discloses “promptly providing alerts to patients *and/or care providers.*” Ghouri ¶ 2 (emphasis added); *see also id.* ¶¶ 44 (“deliver the alerts direct to patient devices . . . or to other entities . . . (e.g., a health care provider device)”), 31. And Appellant’s argument does not sufficiently address the Examiner’s rejection, which instead relies on Sporleder for the output or alert notifying the doctor. Ans. 9.

Appellant’s argument also does not accurately characterize the art or the Examiner’s rejection with respect to timing (e.g., Appellant arguing that in Ghouri no subsequent treatment has been scheduled yet). Ghouri teaches

that the check can occur after treatment has already occurred: “The system may continue to check for whether any follow-up actions have not yet been completed. . . . If the patient records show that the patient completed the follow-up action, at [step] 58 [in Figure 5B], the action is noted as being completed in the patient record.” Ghouri ¶ 34. Moreover, the Examiner is applying Ghouri to Sporleder, and Sporleder discloses checking codes “during the subsequent encounter.” Sporleder ¶ 33.

Thus, we are not persuaded that the Examiner erred in concluding that it would have been obvious to add Ghouri’s check for a gap in care to Sporleder’s check for a prior code during a subsequent encounter. Notifying a doctor of an existing gap in care during a subsequent encounter gives the doctor the opportunity to remedy the gap in care and better conform with any recommended treatment protocols. *See* Ans. 8 (“It would have been obvious to modify the system o[f] Sporleder to incorporate displaying of the candidate codes in response to the time-based evaluation as taught by Ghouri in order to verify that the treatment protocol for a patient is in conformance with standards for diagnosis.”).

For the dependent claims, Appellant argues that Levine fails to cure the deficiencies of Sporleder and Ghouri but does not provide any further substantive argument. *See* Appeal Br. 39. We are not persuaded that Sporleder and Ghouri are deficient for the reasons discussed above, or that Levine fails to teach or suggest the dependent claim limitations based on this conclusory argument.

Accordingly, we sustain the Examiner’s § 103 rejections of independent claims 1, 11, and 20, and their dependent claims 2–6, 8–10, 12–16, 18, and 19. *See* 37 C.F.R. § 41.37(c)(1)(iv).

DECISION

The following table summarizes the outcome of each rejection:

<b>Claims Rejected</b>	<b>Statute</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1-6, 8-16, 18-20	§ 101	Eligibility	1-6, 8-16, 18-20	
1-3, 5, 6, 8-13, 15, 16, 18-20	§ 103	Sporleder, Ghouri	1-3, 5, 6, 8-13, 15, 16, 18-20	
4, 14	§ 103	Sporleder, Ghouri, Levine	4, 14	
<b>OVERALL</b>			1-6, 8-16, 18-20	

TIME TO RESPOND

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.36(a)(1)(iv).

AFFIRMED