Appellant Sarada Mohapatra seeks to overturn a decision of the Patent Trial and Appeal Board holding that his patent application is directed to unpatentable subject matter. We affirm.
Mr. Mohapatra’s patent application is directed to a method for countering credit card fraud by enabling a cardholder to change the card’s security code at any time by using a card account management facility accessible over the Internet. The claimed method provides that the new security code will be different from the code printed on the card and different from the last recorded code. Claim 18 of the application, which is representative, recites the following:

18. A method for countering credit card fraud arising from compromised credit card information by utilizing cardholder changeable card security code (CSC; also known as card verification value CVV2 or card verification data CVD or card identification code CID or card verification code CVC2) comprising:

a) A card issuer enabling change of card security code printed on the card, by

allowing cardholder to choose a new security code value as often as cardholder wishes,

facilitating recordation of chosen card security code by the cardholder by providing an internet connected card account management facility,

using most recently recorded card security code to verify subsequent transaction authorization requests without requiring any change in existing credit cards, terminals, equipment, computer

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1 The Patent Trial and Appeal Board treated claim 18 as representative. Mr. Mohapatra has not challenged that characterization or made any separate arguments directed to any of the four dependent claims.
software and communication protocols used in transaction authorization, and

denying transactions when card security code provided during authorization does not match card security code on record;

b) Cardholder changing card security code any time s/he deems it necessary to mitigate risk from possible card security code compromise, by

selecting a new security code value to be used as personal secret separate from the card without requiring assistance from any software program running on any device,

ensuring that selected new security code value is different from the printed code on first change and is different from last recorded code on subsequent changes,

recording the new card security code value using issuer provided internet connected card account management facility, and

remembering and providing the new card security code when prompted during subsequent credit card authorizations.

The examiner rejected the claims as being directed to non-statutory subject matter under 35 U.S.C. § 101, as indefinite under 35 U.S.C. § 112(b), and for obviousness under 35 U.S.C. § 103.

On appeal, the Patent Trial and Appeal Board reversed the obviousness rejection. The Board noted that the prior art references on which the examiner relied appeared to be related to “electronic credit cards or dynamic security codes,” not to changing the security code printed on a credit card. Ex Parte Mohapatra, No. 2018-008151, 2020 WL 859350, at *5 (P.T.A.B. Feb. 18, 2020).
The Board sustained the other rejections, however. The Board upheld the examiner’s indefiniteness rejection because Mr. Mohapatra had not contested that rejection on appeal. With respect to the section 101 rejection, the Board agreed with the examiner that the claimed “method for countering credit card fraud” by allowing customers to change the security codes on their credit cards was “directed to the abstract idea of a method of organizing human activity in the form of fundamental economic practices.” Id. at *3. The Board noted that beyond the abstract idea of customer-originated changes in the security codes, the claims recited that “an internet connected card account management facility,” such as a financial institution’s computer system, would be used to record and store the changed codes. Id. at *4. That limitation, the Board found, did not convert the abstract idea into a patentable invention, such as by reciting an improvement in computer functionality or other technological innovation. At most, the Board explained, that limitation “generally links the use of the abstract idea to a particular technological environment involving a financial institution.” Id.

The Board also agreed with the examiner’s finding that none of the additional elements of the applicant’s claims, such as Internet connectivity, the web application, or the mobile application, adds significantly more to the abstract idea or transforms that abstract idea into patent-eligible subject matter. Instead, the Board found, steps such as providing an Internet-connected card account management facility or otherwise storing the data do “no more than implement the abstract idea on a computer.” Id.

II

On appeal, the Director of the Patent and Trademark Office does not defend the Board’s ruling on the section 112(b) rejection, but asks us to uphold the Board’s decision based on the section 101 rejection. As to the section 101 issue, we agree with the Board and the examiner that Mr.
Mohapatra’s claims are directed to an abstract idea and that the claims do not contain any additional elements sufficient to render them patent eligible.

Mr. Mohapatra first argues that the Patent and Trademark Office “has issued many patents directed to the same subject matter” in the past 20 years and that it therefore should not have rejected his application. In response, the Director correctly points out that the issuance of other patents in the same field of technology is not a ground for challenging the rejection of a subsequent application. Each application is examined on its own merits for compliance with pertinent statutory requirements. See In re McDaniel, 293 F.3d 1379, 1387 (Fed. Cir. 2002) (“It is well settled that the prosecution of one patent application does not affect the prosecution of an unrelated application.”); In re Gyurik, 596 F.2d 1012, 1018–19 n.15 (CCPA 1979) (“Each case is determined on its own merits. In reviewing specific rejections of specific claims, this court does not consider allowed claims in other applications or patents.”); In re Wertheim, 541 F.2d 257, 264 (CCPA 1976) (“[I]t is immaterial in ex parte prosecution whether the same or similar claims have been allowed to others.”).

Mr. Mohapatra’s second argument is that his claims are not abstract within the meaning of section 101 but are “integrated into a practical application.” Specifically, he contends that the “[p]otential for real world benefits” is indicative that the claims are not abstract.

Section 101 provides that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. But section 101 “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” Alice Corp. v. CLS Bank Int’l, 573 U.S. 208, 216 (2014). A claim is deemed patent ineligible under
section 101 if it fails both parts of the two-step test set forth in *Alice*: that is, the claim is not eligible for patenting if (1) the claim is directed to a patent-ineligible concept, i.e., a law of nature, natural phenomenon, or abstract idea, and (2) the elements of the claim do not add enough to transform the claim into a patent-eligible application. *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166–67 (Fed. Cir. 2018).

Mr. Mohapatra contends that his claims are not directed to abstract ideas, because the claims are narrowly directed to a specific purpose and because they are capable of providing well-defined benefits. Neither of those contentions is sufficient to confer patent eligibility on an otherwise abstract idea, however.

A claim does not cease to be abstract for section 101 purposes simply because the claim confines the abstract idea to a particular technological environment in order to effectuate a real-world benefit. *See Alice*, 573 U.S. at 222; *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1287 (Fed. Cir. 2018); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1353 (Fed. Cir. 2014). The abstract idea underlying Mr. Mohapatra’s claims is for an individual to alter the identification code associated with a financial instrument, such as a credit card, to protect against fraud. The fact that the claims are directed to a specific subset of that abstract idea—in this case, enabling a credit card user to change the security code on the card by using a web application—does not render the idea any less abstract.

Moreover, the fact that an abstract idea may have beneficial uses does not mean that claims embodying the abstract idea are rendered patent eligible. The benefits that flow from performing an abstract idea do not render the abstract idea patentable subject matter if the benefits “flow from performing an abstract idea in conjunction with a well-known database structure.” *BSG Tech*, 899 F.3d at 1287–88. The idea of changeable personal-identification
numbers may be beneficial. But it is also abstract and therefore not patentable without more.

In assessing claims such as claim 18 for patent eligibility under section 101, this court has frequently looked to whether the claims are sufficiently concrete or specific to be directed to a patent-eligible process rather than a patent-ineligible result. For example, in *SAP America*, the court asked whether the claim had “the specificity required to transform [it] from one claiming only a result to one claiming a way of achieving it.” 898 F.3d at 1167. To answer that question, we have stated that courts should “look to whether the claims in the patent focus on a specific means or method, or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery.” *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (“We therefore look to whether the claims in these patents focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery.”). Put differently, the relevant inquiry 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) (quoting *McRO*, 837 F.3d at 1314).

In such cases, claims that recite abstract ideas in purely functional form have regularly been held ineligible for patenting. In *Affinity Labs of Texas, LLC v. DirecTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016), for example, the claim in dispute was directed to a software application that would enable a wireless cellular telephone device outside the range of a regional broadcaster to receive content from the broadcaster by way of a streaming signal. *Id.* at 1258. There was nothing in the claim, however, that described
how to perform the claimed function. *Id.* at 1260–61. For that reason, we held the claim patent ineligible.

Similarly, in *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335 (Fed. Cir. 2018), the claim at issue was directed to an “attention manager” in a computer readable medium, and we held that claim to be patent ineligible. *Id.* at 1344, 1348. That was so, we explained, because the claim recited a “broad, result-oriented” structure, and because “[i]nstead of claiming a solution for producing [a] result, the claim in effect encompasses all solutions.” *Id.* at 1345.

Other cases from this court have employed the same approach while holding claims ineligible under section 101. See, e.g., *Two-Way Media*, 874 F.3d at 1337 (“The claim [before the court] requires the functional results of ‘converting,’ ‘routing,’ ‘controlling,’ ‘monitoring,’ and ‘accumulating records,’ but does not sufficiently describe how to achieve these results in a non-abstract way.”); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017) (“IV argues that the claims set forth a unique solution to a problem with contemporary XML documents. . . . But the claims do not recite particular features to yield these advantages. . . . Indeed, the claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it. Our law demands more.”); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241 (Fed. Cir. 2016) (“The patents claim systems including menus with particular features. They do not claim a particular way of programming or designing the software to create menus that have these features, but instead merely claim the resulting systems.”).

Mr. Mohapatra’s final argument with regard to the section 101 issue is that his claims embody an inventive concept that renders them patentable under step two of the *Alice* test. He identifies the inventive concepts of his invention as making security code numbers changeable, providing for “card account management on web/mobile
devices” to update the changes, and using those features to prevent fraud. As the Board concluded, however, those asserted inventive concepts are in fact just the benefits or goals that Mr. Mohapatra contends will flow from the claimed abstract idea. The claims do not disclose an inventive way by which those goals are to be achieved; instead, they merely announce the goals themselves. That does not constitute an “inventive concept” for purposes of step two of Alice.

Claim 18 recites enabling a cardholder to change the card’s security code and to choose a new security code, but it does not recite any specific method for doing so. The claim recites using the new security code to validate transactions without altering the card or any of the supporting equipment, but it does not specify how that is to be done. And it recites recording and using the new security code by the “internet connected card account management facility,” but it does not provide any specificity as to what that facility is or how that function will be performed.

The functions of recording, storing, and verifying both the card security code and changes to that code thus amount to no more than the implementation of an abstract idea on a computer operating in a conventional manner. That is not enough to convert an abstract idea into patent-eligible subject matter. See Alice, 573 U.S. at 223–25 (computer functions that are well-understood, routine, and conventional do “no more than require a generic computer to perform generic computer functions” and do not constitute an “inventive concept”).

Claim 18 of Mr. Mohapatra’s application, like the claims in the cases discussed above, simply recites an abstract idea without any accompanying implementation mechanism that might qualify as an inventive concept within the meaning of step two of Alice. Nor is there anything else recited in claim 18 that is sufficiently novel to render the invention eligible at step two. We therefore
uphold the Board’s decision that the claims of Mr. Mohapatra’s application are directed to patent-ineligible subject matter.

AFFIRMED