The Patent Office rejected all claims of two patent applications filed by James Bongiorno. The Patent Trial and
Appeal Board ("Board") affirmed. Mr. Bongiorno appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

The only issue is whether these claims are eligible for patenting under 35 U.S.C. § 101. As discussed below, they are not, so we affirm.

I

Two related applications are at issue here: the ’790 application and the ’821 application.1 All pending claims of both applications were rejected under § 101.

According to the specifications, each application “relates to methods and systems of planning and executing a vacation or travel itinerary, and more particularly to software and a portable electronic unit, which may be dedicated to such planning and travel assistance at the destination.” J.A. 394 (’790 application), 939–40 (’821 application). The specifications explain that although travel requires extensive information and planning, there was previously “no means of efficiently accomplishing all of this travel-related planning . . . once arriving at the destination.” J.A. 396, 941.

The specifications note travelers’ customary use of many separate limited-purpose devices (e.g., GPS, travel websites, multimedia players) and physical media (e.g.,

planners, guidebooks). J.A. 395–97, 940–42. In contrast, the claimed invention “combines all of the functionality of the books and electronic gadgets which may need to be utilized in planning and richly experiencing a vacation abroad[] into one elegant and practical planning/touring device, with powerful features to enhance everyone’s vacation experience.” J.A. 397, 942.

The Board treated claim 1 of the ’790 application as representative. The claims at issue recite a “device” that includes a database of travel information, associated code and memory, and a number of functional “buttons”—for instance, a “plan itinerary” button, an “alter itinerary” button, and a “use itinerary” button:

1. A travel itinerary device comprising:

   a housing;

   a non-transitory computer-readable program storage medium having computer readable program code embodied therein, said computer readable code being configured for planning of a travel itinerary;

   a database of travel information, relating to a destination, stored in said non-transitory computer-readable program storage medium;

   a viewing screen;

   a processor for executing said computer readable code, said computer readable code comprising instructions for accessing said database of information on said non-transitory computer-readable program storage medium, and for causing displaying, on said viewing screen, of one or more image screens permitting selective planning of said travel itinerary;

   a plan itinerary button, an alter itinerary button, and one or more additional buttons configured,
when toggled, for communicating a selection, from among a plurality of options displayed within said one or more image screens, to said processor, and for permitting selective entry of one or more characters;

wherein said selective planning comprises actuating said plan itinerary button for causing displaying of a first image screen by said instructions, said first image screen configured for selecting a first itinerary template and one or more additional itinerary templates from among a plurality of said additional templates, said first itinerary template comprising a template for entering of a number of days for said itinerary, an arrival city and a departure city, and for selecting of one of a plurality of graduated levels of a tour schedule intensity, each of said graduated levels of said tour schedule intensity comprising a range of hours for touring for each of said number of days; each of said plurality of additional itinerary templates comprising a respective list of sites relating to a category of said additional template, with a portion of said list of sites in each said selected one or more additional itinerary templates being used to form a complete travel itinerary, said complete travel itinerary comprising a sequence of sites, for each of said number of days, with said sequence of sites being optimized to include as many sites as possible in said range of touring hours, for touring at the destination;

wherein said selective planning further comprises said alter itinerary button configured for causing displaying of a customizing image screen, said customizing image screen permitting, but not requiring, customizing of said sequence of sites of said complete itinerary, using selective access to said database of travel information, for creating a
customized sequence of sites for a complete customized travel itinerary; and

wherein said computer readable code is configured for retrievably storing said selective planning within said program storage medium; and

a use itinerary button, said use itinerary button configured, when actuated, for causing displaying of a guidance screen configured for communicating with a GPS receiver for providing guidance during executing of said travel itinerary at the destination, said guidance comprising providing directions to any of said sequence of sites from a current location of said travel itinerary device.

'790 application claim 1 (J.A. 45–46).

The Board likewise treated claim 1 of the '810 application as representative. The claim recites a “computer program product” with memory and code, presenting similar travel related features—for example, a “weather detour” screen to deal with inclement weather, as well as “indoors-outdoor” ratings for specific travel sites:

1. A computer program product for a method of planning a travel itinerary for use at a destination and for executing the planned travel itinerary at the destination, the computer program product comprising: a tangible non-transitory computer readable storage medium having computer readable program code embodied thereon, the computer readable program code, when executed by a processor, configured for:

storing a database of travel information about the destination in said storage medium, said database of travel information comprising tour sites at the destination;
storing, in said storage medium, a respective indoor-outdoor rating for each said tour site created by assessing each of said tour sites, each said indoor-outdoor rating comprising a majority percentage of said respective tour site comprising indoor site features or a majority percentage of said respective tour site comprising outdoor site features;

providing a user access to said database of travel information by displaying a planning graphical user interface screen configured for selecting of a first itinerary template, and selecting of one or more additional itinerary templates from a plurality of said additional itinerary templates, each said plurality of additional itinerary templates comprising a plurality of said tour sites listed therein and relating to a category of said additional template, said first itinerary template configured for entering of:

- a number of days for said itinerary,
- an arrival city and a departure city at the destination,
- a start-time and an end-time for a number of desired touring hours for each said number of days, and
- a tour intensity level for touring for each of said number of days at the destination;

providing a sequence of tour sites forming a complete travel itinerary for said number of days, using a portion of said tour sites listed in each said selected one or more additional itinerary templates, said complete travel itinerary comprising said sequence of tour sites being optimized to include as many said tour sites as possible in said touring hours, for each of said number of days, according to said tour intensity level;
providing the user access to a weather detour graphical user interface screen configured for selecting one or more blocks of time, each being affected by inclement weather during said desired touring hours of said number of days;

reforming said complete travel itinerary for detouring from said sequence of tour sites, by replacing at least a portion of said sequence of tour sites, at least during said one or more blocks of time affected by inclement weather, by replacing said sites having said majority percentage of outdoor site features for its indoor-outdoor rating, with other tour sites having a highest said majority percentage of indoor site features for its indoor-outdoor rating; and

communicating with a GPS receiver for receiving directions to any of said tour sites of said reformed travel itinerary during executing of said reformed travel itinerary at the destination.

'821 application claim 1 (J.A. 557–58).

II

Patent eligibility is a question of law that may contain underlying issues of fact. Simio, LLC v. FlexSim Software Prods., 983 F.3d 1353, 1358–59 (Fed. Cir. 2020). We review the ultimate eligibility conclusion de novo. Id. at 1359.

In analyzing whether claims are patent eligible under § 101, we employ the two-step Mayo/Alice framework. Alice Corp. v. CLS Bank Int'l, 573 U.S. 208, 217 (2014); Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66, 70–73 (2012). First, we determine whether a patent claim is “directed to” an unpatentable law of nature, natural phenomenon, or abstract idea. Alice, 573 U.S. at 217. If so, we then determine whether the claim nonetheless includes an “inventive concept” sufficient to “transform the nature of
the claim’ into a patent-eligible application.” Id. (quoting Mayo, 566 U.S. at 72, 78).

III

In a detailed analysis, the Board rejected all pending claims under § 101.

At step one of the Alice inquiry, the Board determined that the claims of each application were directed to “planning and executing a vacation or travel itinerary,” which it concluded amounted to a method of organizing human activity—an abstract idea. J.A. 8–14 (‘790 application); J.A. 538–44 (‘821 application). The Board also rejected Mr. Bongiorno’s argument that the claims were directed to an improvement in technology; instead, the claims amounted to a “purportedly new arrangement of generic information.” J.A. 10–13, 538–44 (citing Trading Techs. Int’l, Inc. v. IBG LLC, 921 F.3d 1084, 1093 (Fed. Cir. 2019)). The limitations recited not “inventive programming” but “simply desired results.” J.A. 11, 15, 541, 547.

At step two of the Alice inquiry, the Board determined that the additional recited elements, considered individually or as an ordered combination, do not amount to significantly more than the abstract idea itself. J.A. 14–16, 545–47. That is, the elements amounted simply to “apply[ing] the abstract idea using generic computer components performing routine computer functions.” J.A. 15, 546.

The Board was further unpersuaded that certain limitations that Mr. Bongiorno raises on appeal—e.g., mechanical buttons, a “weather detour” interface screen, a site-by-site “indoor-outdoor rating”—changed the eligibility conclusion. See, e.g., J.A. 15–28, 546–47.

We agree with the Board, which addressed Mr. Bongiorno’s claims thoroughly. The claims of both applications are drawn to organizing human activity, including planning and executing a travel itinerary, in a manner that
renders the claims directed to an abstract idea. See Alice, 573 U.S. at 220, 226–27. The additional claim elements are merely generic computer components performing routine functions, and we agree with the Board that the claims do not include an inventive concept that would confer eligibility. See id. at 223–26.

IV

We have considered Mr. Bongiorno’s other arguments and find them unpersuasive. Because we agree with the Board that the claims are not patent-eligible, we affirm.

AFFIRMED