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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JESSE H. DAVIS

Appeal 2018-006482
Application 14/523,355
Technology Center 3600

Before JEAN R. HOMERE, CAROLYN D. THOMAS, and
SCOTT RAEVSKY, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE¹

Pursuant to 35 U.S.C. § 134(a), Appellant² appeals from the Examiner's decision to reject claims 1–23. Appeal Br. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We refer to the Specification, filed Oct. 24, 2014 (“Spec.”); Final Office Action, mailed July 24, 2017 (“Final Act.”); Appeal Brief, filed Oct. 13, 2017 (“Appeal Br.”); Examiner’s Answer, mailed Apr. 18, 2018 (“Ans.”), and Reply Brief, filed June 11, 2018 (“Reply Br.”).

² We use the word “Appellant” to refer to “Applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Creative Mobile Technologies, LLC. Appeal Br. 1.

II. CLAIMED SUBJECT MATTER

According to Appellant, the claimed subject matter relates to in-vehicle equipment (203) including passenger information monitor (PIM-220) containing display (225) for presenting targeted content (227) and for interacting with a passenger. Spec. ¶¶ 1, 22, 223, Figure 2. In-vehicle equipment (203) further includes wireless communication device (241) for communicating with remote server (240), which may access general advertising content from a database library for presentation to the passenger. *Id.* ¶¶ 29, 67. Once PIM (220) is paired with mobile device (200) via mobile device's pairing module (202), mobile device (200) transmits passenger information (204) to PIM (220), which in turn, communicates passenger information (204) along with vehicle information (205) to remote server (240). *Id.* ¶¶ 21, 28. In return, remote server (240) uses passenger information (204) to retrieve targeted content from the database library, and forwards the targeted content to PIM (220), which presents the content on display (225) to the passenger. *Id.* ¶ 28.

Claims 1, 15, 19, and 22 are independent. Claim 1 is illustrative of the claimed subject matter:

1. A system for interacting with a passenger within a vehicle comprising:
 - a passenger information monitor having a first display for presenting targeted primary content to the passenger;
 - a wireless communication device which communicates information between a remote server outside of the vehicle and the passenger information monitor;
 - a database library containing general advertising content accessible by the remote server;
 - a mobile device having a second display, and a pairing module operatively coupled to the mobile device, configured to enable

communication between the mobile device and the passenger information monitor,

wherein once paired, the mobile device communicates with the passenger information monitor and transmits passenger information to the passenger information monitor,

wherein the passenger information monitor transmits the passenger information along with vehicle information to the remote server via the wireless communication device, and

wherein the passenger information monitor receives targeted primary content from the remote server, the remote server deriving the targeted primary content based on the database library of general content and the received passenger information, the passenger information monitor displaying the targeted primary content on the first display to the passenger.

Figure 2, discussed above and reproduced below, is useful for understanding the claimed invention:

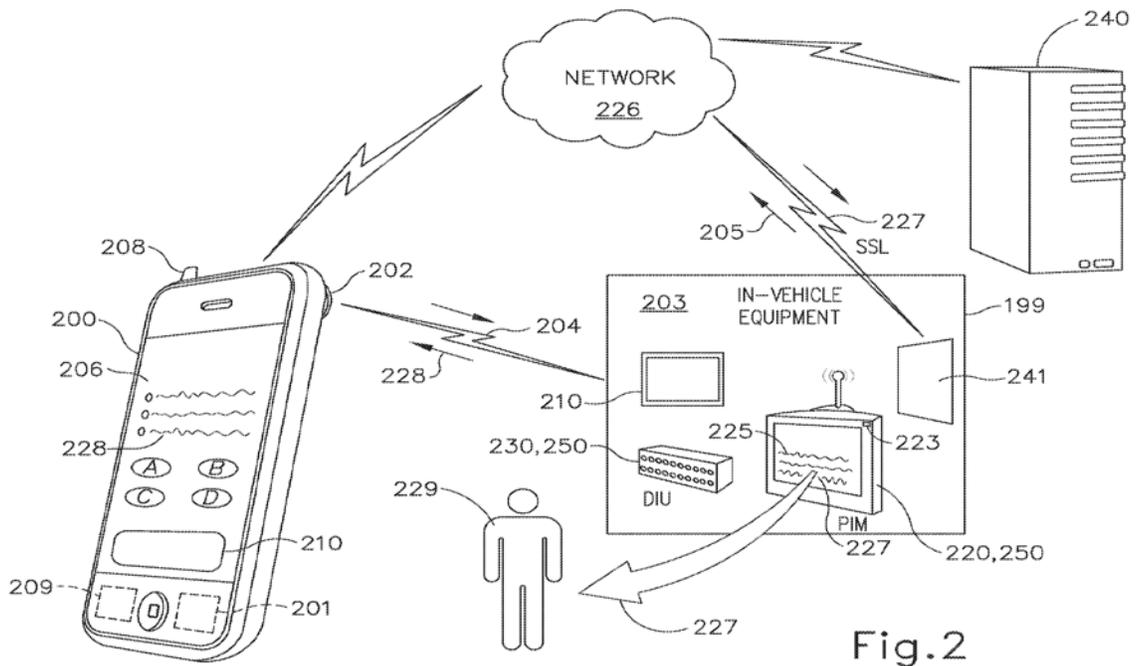


Figure 2 depicts an illustration of a mobile device interacting with and communicating with in-vehicle equipment within a vehicle. *Id.* ¶ 9.

III. REFERENCES

The Examiner relies upon the following references³

Name	Number	Filed	Published
Meunier	US 2002/0186144 A1	May 1, 2002	Dec. 12, 2002
Farley	US 2003/0130769 A1	Nov. 14, 2002	July 10, 2003
Lee	US 2008/0106376 A1	Mar. 7, 2007	May 8, 2008
Lopes	US 8,369,848 B1	Mar. 29, 2012	Feb. 5, 2013

IV. REJECTIONS

The Examiner rejects claims 1–23 as follows:

1. Claims 1–23 are rejected under 35 U.S.C. § 101 as not directed to patent eligible subject matter. Final Act. 2–6.
2. Claim(s) 1–4, 8, 9, 12, 14, 15, 17 and 19–21 are rejected under 35 U.S.C. § 102(a)(1) as being anticipated by Lee. *Id.* at 6–12.
3. Claims 5–7, 13 and 18 are rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Lee and Lopes. *Id.* at 13–15.
4. Claims 10, 22 and 23 are rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Lee and Meunier. *Id.* at 15–18.
5. Claims 11 and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Lee, Farley and Meunier. *Id.* at 18–19.

³ All reference citations are to the first named inventor only.

V. ANALYSIS

1. *Prior Art Rejections*

Appellant requests that the prior art rejections 2 through 5 of claims 1–23 as set forth above be held in abeyance.⁴ Appeal Br. 12–13. Because Appellant has not presented any substantive arguments to rebut or challenge the correctness of the Examiner’s prima facie cases of anticipation and obviousness rejections, Appellant has waived such arguments.⁵ Therefore, we summarily affirm the Examiner’s anticipation and obviousness rejections of claims 1–23.

2. *Patent Eligibility Rejection*

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the U.S. Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Court’s two-step framework, described in *Mayo* and *Alice*.

⁴ Appellants may not reserve arguments for some later time. Arguments not made are considered waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

⁵ *See Hyatt v. Dudas*, 551 F.3d 1307, 1314 (Fed. Cir 2008) (“When the appellant fails to contest a ground of rejection to the Board, section 1.192(c)(7) [(now section 41.37(c)(1)(iv))] imposes no burden on the Board to consider the merits of that ground of rejection. . . . [T]he Board may treat any argument with respect to that ground of rejection as waived.”). *See also In re Guess*, 2009 WL 1598475 at *1 (Fed. Cir. June 9, 2009) (“Appellants failed to argue that any limitations unique to [the claims] survive [the rejection]. Appellants have therefore waived any such arguments on appeal.”) (citing *In re Watts*, 354 F.3d 1362, 1367 (Fed. Cir. 2004)).

Alice, 573 U.S. at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” See *Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); see also *Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*Diehr*, 450 U.S. at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 176; see also *id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Court also indicated that a claim “seeking patent protection for that formula in the

abstract . . . is not accorded the protection of our patent laws, and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citation omitted) (citing *Benson* and *Flook*), *id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must 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.” *Alice*, 573 U.S. at 221. “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The Office published revised guidance on the application of Section 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50–57 (Jan. 7, 2019) (“2019 PEG”). Recently, the Office published an update to that guidance. *October 2019 Patent Eligibility Guidance Update*, 84 Fed. Reg. 55,942 (hereinafter “PEG Update”). Under the 2019 PEG and PEG Update, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and

- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).⁶

See 2019 PEG, 52, and 55–56. Only if a claim: (1) recites a judicial exception; and (2) does not integrate that exception into a practical application, does the office then look to whether the claim:

- (3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or
- (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See 2019 PEG 56.

We analyze the patent-eligibility rejection with the principles identified above in mind.

Examiner’s Findings and Conclusions

In the first part of the *Alice* inquiry, the Examiner determines that claims 1–23 are directed to the abstract idea of “interacting with a passenger within a vehicle.” Final Act. 3. According to the Examiner, the underlying steps in the cited claims, when viewed individually and in combination, have been identified by the courts to describe the abstract concepts of collecting information, analyzing it, and displaying results of the collected/analyzed information (*Electric Power Group*), and delivering user selected media content to portable devices (*Affinity Labs v. Amazon.com*). *Id.* at 4.

In particular, the Examiner determines the following:

[T]he concept in *Electric Power Group*, is not meaningfully different from claim 1. The claims in *Electric Power Group* recite

⁶ All references to the MPEP are to 9th Ed., Rev. 08.2017 (Jan. 2018).

steps that receive a plurality of data streams and sources, detect and analyze events in real-time by deriving dynamic metrics from the data streams, display visualization of measurements from the data streams and the dynamic metrics, accumulate and update the measurements and dynamic metrics, and derive an indicator from a combination of measurements and dynamic metrics. *The present invention is analogous in that it too receives data such as the server receiving passenger information and vehicle information, and generating data (certain results), such as targeted primary content according to the passenger and vehicle information received.* The claims in the present invention do not improve the functioning of the computer. Rather, the claimed invention in this case uses a computer in routine and conventional ways to produce information (targeted primary content) without particular inventive technology—an abstract idea, as did the claims in *Electric Power Group*. . . . There is no further specification of particular technology for performing the steps. *See Affinity Labs of Texas, LLC v. DIRECTTV, LLC*, 838 F.3d 1253, 1263 (Fed. Cir. 2016).

Ans. 5.

In the second part of the *Alice* inquiry, the Examiner determines the claims do not recite additional elements sufficient to amount to significantly more than the abstract idea. Final Act. 4–5. In particular, the Examiner determines the following:

The claim recites the additional limitations of a “wireless communication device” *configured for communicating information between a remote server outside of the vehicle and the passenger information monitor, a “passenger information monitor” for presenting primary control to the passenger, a “mobile device” for interacting with in-vehicle equipment and a remote server, a “remote server” for receiving, storing, processing and transmitting information to another computer and a “in-vehicle equipment” for generating passenger information.* Claims 1, 15, 19 and 22 also indicates that the content is served by a “**wireless communication device**”, a “passenger information monitor”, a “*mobile device*”, a “*remote server*” and a “*in-vehicle equipment*” are recited at a high

level of generality and are recited as performing generic computer functions routinely used in computer applications. Generic computer components recited as performing generic computer functions that are well-understood, routine and conventional activities amount to no more than implementing the abstract idea with a computerized system. Next, “wireless communication device” is stated at a high level of generality and its broadest reasonable interpretation comprises only the serving content using a particular style of architecture through the use of some unspecified generic computers and interface. The use of generic computer components to transmit information through an unspecified interface does not impose any meaningful limit on the computer implementation of the abstract idea. Thus, **taken alone**, the additional elements do not amount to significantly more than a judicial exception. Looking at the limitations as an **ordered combination** adds nothing that is not already present when looking at the elements taken individually. There is no indication that the combination of elements improves the functioning of a computer or improves any other technology. Their collective functions merely provide conventional computer implementation.

The use of generic computer components to transmit information through an unspecified interface does not impose any meaningful limit on the computer implementation of the abstract idea.

Id.

The Examiner further finds that the additional elements of the claims, taken alone and as an ordered combination, do not transform the abstract idea into a patent eligible invention, because they “each execute in a manner routinely and conventionally expected of these elements,” and are “merely the combined and coordinated execution of generic computer functionalities which are well-understood, routine and conventional activities previously known to the industry.”

Ans. 6.

Appellant's Contentions

In the first part of the *Alice* inquiry, Appellant argues that the Examiner has failed to make a prima facie case of ineligibility because the Examiner has not identified one of the categories of abstract ideas, as set forth by the courts, to which the claims are allegedly directed. Appeal Br. 5–9. Appellant argues that the Examiner’s identification of the claims as directed to the abstract idea of “interacting with a passenger in a vehicle” is not a recognized classification of abstract ideas as set forth in *Alice*. *Id.* Instead, Appellant asserts the following:

Applicant’s claimed invention, although including some aspects of interaction with a passenger, involves far more complex processes, such as providing a database library containing general advertising content, pairing a passenger information monitor with a mobile device, wirelessly communicating information between a remote server and the passenger information monitor, transmitting passenger information along with vehicle information to the remote server, deriving, by the remote server, targeted primary content based on the database library of general content and the received passenger information, and then displaying the derived or targeted content on the passenger's mobile display. At the very least, deriving the targeted content transforms the data in the database library to a different state, namely targeted content. This is not abstract at all, does not represent an “idea of itself,” and is not similar to any of the cited examples of abstract ideas provided by the court in various decisions.

Id. at 9.

In the second part of the *Alice* inquiry, Appellant argues that the claims, taken as a whole and in an ordered combination amount to significantly more than the purported abstract idea. *Id.* at 10. According to Appellant, claim 1 provides a framework that concretely ties together tangible hardware elements (e.g., passenger information monitor, wireless

communication device, database library, remote server, multiple displays) in a non-conventional and non-generic arrangement that transforms an arguably abstract idea into a patent-eligible invention. *Id.* at 10. Therefore, Appellant argues that by failing to consider the cited claim elements individually, and as an ordered combination, the Examiner has failed to meet his burden under the second prong of *Alice*. *Id.* at 11–12. In particular, Appellant states the following:

The Examiner certainly fails to mention or address at least several significant elements. First, the Examiner utterly fails to address the element of a remote server that derives the targeted primary content based on the database library of general content and the received passenger information and displays such targeted primary content on the first display to the passenger. Deriving the targeted primary content essentially transforms the general content in the database library into targeted content. The two forms of content are very different and one form is transformed into another form by the derivation step, as required by the claims. Such transformation is certainly not well known nor routine in the context of applicant's system, yet the Examiner completely ignores this important element in his analysis.

Second, the Examiner completely ignores the element directed to the pairing module coupled to the mobile device that operatively pairs mobile device with the passenger information monitor. This is a critical element because without this claimed element, the derived targeted information could not reach the passenger. This element, in combination with the element of deriving the targeted content, and taken as a whole with the remaining elements of the claims, provides significantly more than the purported abstract idea of merely “interacting with a passenger in a vehicle,” as set forth by the Examiner.

Id. at 12.

Our Review

Applying the guidance set forth in the 2019 PEG, we determine whether the Examiner has erred in rejecting the claims as directed to patent ineligible subject matter.

In revised step 1 of 2019 PEG, we consider whether the claimed subject matter falls within the four statutory categories of patent-eligible subject matter identified by 35 U.S.C. § 101: process, machine, manufacture, or composition of matter. Because independent claims 1, 15, 19, and 22 recite a “system” including a processor for performing various functions, claims 1, 15, 19, and 22 fall within a machine category of patent-eligible subject matter.

In prong 1 of revised step 2A of the 2019 PEG, we determine whether any judicial exception to patent eligibility is recited in the claims. The guidance identifies three judicially-excepted groupings of abstract ideas: (1) mathematical concepts; (2) certain methods of organizing human activity, such as fundamental economic practices; and (3) mental processes. Independent claim 1 recites, *inter alia*, the following claim elements that interact with a passenger as follows:

- (1) a mobile device, upon being paired with a PIM, transmits passenger information to the PIM;
- (2) the PIM transmits passenger information along with vehicle information to a remote server via a wireless communication device;
- (3) the remote server uses received information to derive targeted information from general advertising content

in the database library, and returns the targeted content to the PIM ;

(4) the PIM displays the targeted content on a first display to the passenger.

As an initial matter, we note that the preamble of claim 1 recites “a system for interacting with a passenger within a vehicle.” Further, as set forth in items 1 through 4 above, such interaction with the passenger merely consists in a remote server using passenger information and vehicle information received from the PIM to derive targeted content from general advertising content in a database library, and to return targeted content to the PIM for subsequent display to the passenger. Spec. ¶ 20. Therefore, claim 1 recites displaying targeted content (e.g., advertisement) specifically tailored for the passenger within the vehicle based on the passenger’s profile information and location. Such manipulation of customer data to provide targeted advertisement to customers has been identified by our reviewing court as a fundamental economic practice long prevalent in commerce. *See e.g., Cyberfone*. Consequently, the claim recites a method of organizing human activity, a judicial exception involving commercial interaction in an ecommerce environment wherein a business owner markets targeted advertisements to a customer based on customer’s profile and location. Additionally, we determine these limitations are steps of “managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions),” which the 2019 PEG provides are “[c]ertain methods of organizing human activity.” 84 Fed. Reg. 52. Accordingly, independent claims 1, 15, 19, and 22 recite the judicial exception of certain methods of organizing human activity.

Having determined that the claims recite a judicial exception, our analysis under the 2019 PEG turns now to determining whether there are “additional elements that integrate the judicial exception into a practical application.” *See* MPEP § 2106.05(a)–(c), (e)–(h).⁷ “Integration into a practical application” requires an additional element or a combination of additional elements in the claim to apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the exception. 84 Fed. Reg. at 53.

Appellant’s claims 1, 15, 19, and 22 recite computer-related limitations (e.g., PIM, remote server, mobile device). Appellant argues that “[a]t the very least, deriving the targeted content transforms the data in the database library to a different state, namely targeted content.” Appeal Br. 9.

We do not find the recited computer-related limitations are sufficient to integrate the judicial exception into a practical application. The Specification does not provide additional details about the PIM, remote

⁷ Specifically, we determine whether the claims recite:

- (i) an improvement to the functioning of a computer [(or a mobile device)];
- (ii) an improvement to another technology or technical field;
- (iii) an application of the abstract idea with, or by use of, a particular machine;
- (iv) a transformation or reduction of a particular article to a different state or thing; or
- (v) other meaningful limitations beyond generally linking the use of the abstract idea to a particular technological environment.

Id.

server, and mobile device that would distinguish them from any generic processing devices that communicate with one another in a computer network environment. Spec. ¶¶ 16–20. Although we do not dispute that these processing and communications devices include specific instructions for performing the recited functions, Appellant has not explained persuasively how the derived targeted content transforms the data in the database library. *See* MPEP § 2106.05(a). Rather, the claims merely adapt the certain methods of organizing the human activity through processing and communication devices to retrieve from the database library targeted advertisement that may be of interest to a passenger based on the passenger profile and location. *See Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017) (“Our prior cases have made clear that mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology.”); *see also Bancorp Services, L.L.C. v. Sun Life Assurance Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (A computer “employed only for its most basic function . . . does not impose meaningful limits on the scope of those claims.”).

Further, Appellant’s identified improvements are to the abstract idea itself, not improvements to a technology or computer functionality. That is, the cited claim limitations do not improve the functionality of the processing devices by performing operations to provide targeted advertisements to a passenger in a vehicle based on the passenger’s profile and location, nor do they achieve an improved technological result in conventional industry practice. *See McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016). Thus, the claims do not recite an additional element

reflecting an improvement in the functioning of a computer, or an improvement to other technology or technical field. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258-59 (Fed. Cir. 2014).

Nor do the claims recite an additional element that implements the abstract idea with a particular machine or manufacture that is integral to the claim. Instead, the claim limitations only recite additional elements that add insignificant extra-solution activity to the judicial exception. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011). Our reviewing court has consistently held that mere characterizations of human activities within the stream of commerce are not patent eligible. *See, e.g., Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (claims directed to collection, manipulation, and display of data); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (customizing information and presenting it to users based on particular characteristics). Prior to the Internet, such activities were widely practiced, and became computerized to facilitate the distribution of targeted advertisements to passengers in a vehicle. *See OIP Technologies, Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1364 (Fed. Cir. 2015).

Because claim steps 1–4, outlined above, do not (1) provide any technical solution to a technical problem as required by *DDR Holdings*;⁸

⁸ *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). The Federal Circuit found *DDR*'s claims are patent-eligible under 35 U.S.C. § 101 because *DDR*'s claims: (1) do not merely recite “the performance of some business practice known from the pre-Internet world” previously disclosed in *Bilski* and *Alice*; but instead (2) provide a technical solution to a technical problem unique to the Internet, i.e., a “solution . . . necessarily rooted in computer technology in order to overcome a problem

(2) provide any particular practical application as required by *BASCOM*;⁹ or
(3) entail an unconventional technological solution to a technological
problem as required by *Amdocs*,¹⁰ we agree with the Examiner’s
determination that Appellant’s claims 1, 15, 19 and 22 are directed to an
abstract idea that is not integrated into a practical application.

Alice/Mayo—Step 2B (Inventive Concept)

Turning to step 2B of the 2019 PEG, we look to whether the claim:
(a) recites a specific limitation or combination of limitations that are not
well-understood, routine, conventional activity in the field; or (b) simply
appends well-understood, routine, conventional activities previously known
to the industry, specified at a high level of generality, to the judicial
exception. 84 Fed. Reg. 56; *see Alice*, 573 U.S. at 217 (“[W]e consider the
elements of each claim both individually and ‘as an ordered combination’”
to determine whether the claim includes “significantly more” than the
ineligible concept); *see also BASCOM*, 827 F.3d at 1350 (“[A]n inventive
concept can be found in the non-conventional and non-generic arrangement
of known, conventional pieces.”).

We discern no additional element or combination of elements recited
in Appellant’s independent claims 1, 15, 19, and 22 that contain any
“inventive concept” or add anything “significantly more” to transform the
abstract concept into a patent-eligible application. *Alice*, 573 U.S. at 221.

specifically arising in the realm of computer networks.” *DDR*, 773 F.3d at
1257.

⁹ *See BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d
1341 (Fed. Cir. 2016).

¹⁰ *See Amdocs Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016).

We are not persuaded by Appellant’s remarks, noted above, alleging the claims are directed to a non-routine and unconventional system because deriving the targeted primary content essentially transforms the general content in the database library into targeted content. Appellant has failed to establish on this record how the alleged transformation is distinguished from routine querying of the database library to retrieve relevant advertisements based on criteria specified in the query including passenger profile info and location. We agree with the Examiner that using a generic processing and communication devices to collect, analyze, process data and displaying the result in the manner suggested is a routine and conventional approach to data management. Final Act. 4–5.

As noted above, Appellant does not direct our attention to any portion of the Specification indicating that the claimed processing and communication devices perform anything other than well-understood, routine, and conventional functions, such as receiving, analyzing, processing, and displaying data. *See Elec. Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (“Nothing in the claims, understood in light of the [S]pecification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information.”); *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”); *Alice*, 573 U.S. at 224–26 (receiving, storing, sending information over networks insufficient to add an inventive concept). Instead, Appellant’s claimed subject matter simply uses generic computer components (computer system) to perform the

abstract idea of providing targeted advertisements to a passenger in a vehicle based on the passenger's profile information and location. Spec. ¶¶ 16–20. As noted above, the use of a generic computer does not alone transform an otherwise abstract idea into patent-eligible subject matter. As our reviewing court has observed, “after *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.” *DDR*, 773 F.3d at 1256 (citing *Alice*, 573 U.S. at 223).

Because the discussed claim elements only recite generic computer functions that are well-understood, routine, and conventional, individually and in combination, the claim is devoid of an inventive concept. *See Alice*, 573 U.S. at 217. Appellant is reminded that “the ‘inventive concept’ [under the second part of the *Mayo/Alice* test] cannot be the abstract idea itself” and “*Berkheimer* . . . leave[s] untouched the numerous cases from this court which have held claims ineligible because the only alleged ‘inventive concept’ is the abstract idea.” *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1374 (Fed. Cir. 2018) (Moore, J., concurring). “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.” *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). We, therefore, agree with the Examiner that the computer functions recited in the claims were, in fact, generic, and are met by numerous precedent establishing that using a generic computer to expedite and automate processes traditionally performed manually, or that are otherwise abstract, is a well-understood, routine, and conventional use of such computers. Final Act. 4–5; *see also, e.g., Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1321 (Fed. Cir. 2016) (utilizing an

intermediary computer to forward information); *Bancorp Services, L.L.C.*, 687 F.3d at 1278 (“The computer required by some of Bancorp’s claims is employed only for its most basic function, the performance of repetitive calculations, and as such does not impose meaningful limits on the scope of those claims.”).

Therefore, we conclude that claim 1’s elements, both individually and as an ordered combination, do not provide an inventive concept. *See* 84 Fed. Reg. 56; *Berkheimer*, 881 F.3d at 1370 (“The limitations amount to no more than performing the abstract idea of parsing and comparing data with conventional computer components.”); *Bancorp*, 687 F.3d at 1278 (“[T]he use of a computer in an otherwise patent-ineligible process for no more than its most basic function—making calculations or computations—fails to circumvent the prohibition against patenting abstract ideas and mental processes.”).

To the extent Appellant argues the claims necessarily contain an “inventive concept” based on their alleged novelty or non-obviousness over the cited references, Appellant misapprehends the controlling precedent. Although the second part in the *Alice/Mayo* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but, rather, a search for “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.’” *Alice*, 573 U.S. at 217–218 (quoting *Mayo* 566 U.S. 72–73). A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90.

Appellant is further reminded that, in many cases, “relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.” *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (citing *Alice*, 573 U.S. at 224) (“[U]se of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions” is not an inventive concept.); *see also, e.g., Intellectual Ventures I LLC v. Capital One Bank*, 792 F.3d at 1370 (“[M]erely adding computer functionality to increase the speed or efficiency of the process does not confer patent eligibility on an otherwise abstract idea.”). Therefore, the functions recited in independent claims 1, 15, 19 and 22 do not add meaningful limitations beyond generally linking the abstract idea to the particular technological environment. *See* Final Act 4–6.

Because Appellant’s claims 1, 15, 19 and 22 are directed to a patent-ineligible abstract concept and do not recite something “significantly more” under the second part of the *Alice* analysis, we sustain the Examiner’s rejection of independent claims 1, 15, 19 and 22 under 35 U.S.C. § 101.

Appellant does not present additional arguments for dependent claims 2–14, 16–18, and 20, and 21. Accordingly, for the same reasons as set forth for independent claims 1 and 11, we sustain the Examiner’s 35 U.S.C. § 101 rejection of dependent claims 2–14, 16–18, and 20, and 21.

VI. CONCLUSION

We affirm the Examiner’s anticipation rejection of claims 1–4, 8, 9, 12, 14, 15, 17, 19–21 under 35 U.S.C. § 102. We affirm the Examiner’s obviousness rejections of claims 5–7, 10, 11, 13, 16, 18, 22, and 23, under

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35 U.S.C. § 103. We affirm the Examiner's patent eligibility rejection of claims 1–23 under 35 U.S.C. § 101.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–23	101	Eligibility	1–23	
1–4, 8, 9, 12, 14, 15, 17, 19–21	102	Lee	1–4, 8, 9, 12, 14, 15, 17, 19–21	
5–7, 13, 18	103	Lee, Lopes	5–7, 13, 18	
10, 22, 23	103	Lee, Meunier	10, 22, 23	
11, 16	103	Lee, Farley, Meunier	11, 16	
Overall Outcome			1–23	

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

AFFIRMED