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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte AVEEK MUKHOPADHYAY,
SUYASH KUMAR SINGH,
JUBISH CHERIYA PARAMBATH,
ANAND SANKARAN,
and MUHAMMED SHAPHY

Appeal 2019-001592
Application 13/413,226
Technology Center 3600

Before MURRIEL E. CRAWFORD, ANTON W. FETTING, and
CYNTHIAL. MURPHY, *Administrative Patent Judges*.

FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Aveek Mukhopadhyay, Suyash Kumar Singh, Jubish Cheriya Parambath, Anand Sankaran, and Muhammed Shaphy (Appellant²) seek review under 35 U.S.C. § 134 of a final rejection of claims 1, 3–5, 9–14, 16, and 18–26, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

The Appellant invented a way of providing advertisements to multiple devices via screens or displays associated with the devices. Specification Title; para. 10.

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below (bracketed matter and some paragraphing added).

1. A method comprising:

[1] receiving, by a server device and via a network, a first request from a set-top box of a user, the set-top box being associated with a set-top box identifier;

[2] selecting, by the server device, a first advertisement based on the first request;

[3] transmitting, by the server device and via the network, the first advertisement to the set-top box;

[4] updating, by the server device, an indicator to indicate that the first advertisement has been transmitted to the set-top box;

¹ Our decision will make reference to the Appellant’s Appeal Brief (“App. Br.,” filed July 5, 2018) and Reply Brief (“Reply Br.,” filed December 10, 2018), and the Examiner’s Answer (“Ans.,” mailed October 23, 2018), and Final Action (“Final Act.,” mailed March 22, 2018).

² We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Verizon Communications Inc (Appeal Br. 3).

[5] receiving, by the server device and via the network based on transmitting the first advertisement to the set-top box, a second request from a user device of the user, the second request including a user identifier and a user device identifier;

[6] determining, by the server device and based on the user identifier, the user device identifier, and the set-top box identifier, that the user device and the set-top box are associated with the user;

[7] determining, by the server device, profile information associated with the user based on the user identifier, the user device identifier, and the set-top box identifier, the profile information including capabilities information identifying capabilities of the user device;

[8] determining, by the server device, that the server device transmitted the first advertisement to the set-top box based on the indicator;

[9] selecting, by the server device, a second advertisement, for the user device, based on determining that the server device has transmitted the first advertisement to the set-top box;

[10] customizing, by the server device, the second advertisement for the user device based on the profile information, customizing the second advertisement comprising:

including a video, into the second advertisement, based on the profile information indicating that the user prefers advertisements with video,

including a first user interface element, into the second advertisement, that allows the user to initiate a transaction associated a particular item,

and

including a second user interface element, into the second advertisement, that causes dismissal of the second advertisement;

[11] transmitting, by the server device, via the network, and after customizing the second advertisement, the second

advertisement to the user device, the first advertisement and the second advertisement advertising the particular item;

[12] receiving, by the server device and via the network, a message regarding a selection of the first user interface element or the second user interface element;

and

[13] performing, by the server device and based on the message indicating a selection of the first user interface element, an action that initiates the transaction associated with the particular item.

Claims 1, 3–5, 9–14, 16, and 18–26 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than abstract conceptual advice of results desired.

ANALYSIS

STEP 1³

Claim 1, as a method claim, nominally recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. The issue before us is whether it is directed to a judicial exception without significantly more.

STEP 2

The Supreme Court

set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, . . .

³ For continuity of analysis, we adopt the steps nomenclature from 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Revised Guidance”).

determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before us? To answer that question, . . . 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. [The Court] 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.”

Alice Corp. v. CLS Bank Int’l, 573 U.S. 208, 217–18 (2014) (citations omitted) (citing *Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 566 U.S. 66 (2012)). To perform this test, we must first determine what the claims are directed to. This begins by determining whether the claims recite one of the judicial exceptions (a law of nature, a natural phenomenon, or an abstract idea). Then, if the claims recite a judicial exception, determining whether the claims at issue are directed to the recited judicial exception, or whether the recited judicial exception is integrated into a practical application of that exception, i.e., that the claims “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 judicial exception.” Revised Guidance, 84 Fed. Reg. at 54. If the claims are directed to a judicial exception, then finally determining whether the claims provide an inventive concept because the additional elements recited in the claims provide significantly more than the recited judicial exception.

STEP 2A Prong 1

At a high level, and for our preliminary analysis, we note that method claim 1 recites receiving request data; selecting and transmitting ad data; updating indicator data; receiving ad data; determining identifier, profile and transmission data; selecting, customizing, and transmitting ad data; receiving message data; and performing some action that initiates a transaction.

Selecting and determining data are rudimentary forms of analysis.

Customizing data is modifying data. Performing an action that initiates something in a computer is generating software instruction data. Thus, claim 1 recites receiving, analyzing, transmitting, updating, and generating data. None of the limitations recites technological implementation details for any of these steps, but instead recite only results desired by any and all possible means.

From this we see that claim 1 does not recite the judicial exceptions of either natural phenomena or laws of nature.

Under Supreme Court precedent, claims directed purely to an abstract idea are patent in-eligible. As set forth in the Revised Guidance, which extracts and synthesizes key concepts identified by the courts, abstract ideas include (1) mathematical concepts⁴, (2) certain methods of organizing human activity⁵, and (3) mental processes⁶. Among those certain methods

⁴ See, e.g., *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010); *Mackay Radio & Telegraph Co. v. Radio Corp. of Am.*, 306 U.S. 86, 94 (1939); *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018).

⁵ See, e.g., *Bilski*, 561 U.S. at 628; *Alice*, 573 U.S. at 219–20; *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed Cir. 2014); *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1383 (Fed. Cir.

of organizing human activity listed in the Revised Guidance are commercial or legal interactions. Like those concepts, claim 1 recites the concept of managing advertising information. Specifically, claim 1 recites operations that would ordinarily take place in advising one to generate a customized ad that induces some transaction based on viewer data and a prior ad. The advice to generate a customized ad that induces some transaction based on viewer data and a prior ad involves selecting an ad, which is an economic act, and transmitting an ad, which is an act ordinarily performed in the stream of commerce. For example, claim 1 recites “selecting . . . a first advertisement,” which is an activity that would take place whenever one is managing advertising information in commerce. Similarly, claim 1 recites “transmitting . . . the second advertisement,” which is also characteristic of commercial advertising.

The Examiner determines the claims to be directed to advertising, marketing, and sales activities or behaviors. Final Act. 4.

The preamble to claim 1 does not recite what it is to achieve, but the steps in claim 1 result in managing advertising information by generating a customized ad that induces some transaction based on viewer data and a prior ad absent any technological mechanism other than a conventional computer for doing so.

As to the specific limitations, limitations 1 and 5 recite receiving data. Limitations 2–4 and 6–13 recite generic and conventional analyzing,

2017); *In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1160–61 (Fed. Cir. 2018).

⁶ *See, e.g., Benson*, 409 U.S. at 67; *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016).

transmitting, updating, and generating advertising data, which advise one to apply generic functions to get to these results. The limitations thus recite advice for generating a customized ad that induces some transaction based on viewer data and a prior ad. To advocate generating a customized ad that induces some transaction based on viewer data and a prior ad is conceptual advice for results desired and not technological operations.

The Specification Title and paragraph 10 each describes the invention as relating to providing advertisements to multiple devices via screens or displays associated with the devices. Thus, all this intrinsic evidence shows that claim 1 recites managing advertising information. This is consistent with the Examiner's determination.

This in turn is an example of commercial or legal interactions as a certain method of organizing human activity because managing advertising information is a way to induce commercial sales transactions. The concept of managing advertising information by generating a customized ad that induces some transaction based on viewer data and a prior ad is one idea for inducing such behavior. The steps recited in claim 1 are part of how this might conceptually be premised.

Our reviewing court has found claims to be directed to abstract ideas when they recited similar subject matter. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014).

Alternately, this is an example of concepts performed in the human mind as mental processes because the steps of receiving, analyzing, transmitting, updating, and generating data mimic human thought processes of observation, evaluation, judgment, and opinion, perhaps with paper and pencil, where the data interpretation is perceptible only in the human mind.

See In re TLI Commc 'ns LLC Patent Litig., 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016). Claim 1, unlike the claims found non-abstract in prior cases, uses generic computer technology to perform data reception, analysis, transmission, update, and generation and does not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (finding claims not abstract because they “focused on a specific asserted improvement in computer animation”). As such, claim 1 recites receiving, analyzing, transmitting, updating, and generating data, and not a technological implementation or application of that idea.

From this we conclude that at least to this degree, claim 1 recites managing advertising information by generating a customized ad that induces some transaction based on viewer data and a prior ad, which is a commercial and legal interaction, one of certain methods of organizing human activity identified in the Revised Guidance, and, thus, an abstract idea.

STEP 2A Prong 2

The next issue is whether claim 1 not only recites, but is more precisely directed to this concept itself or whether it is instead directed to some technological implementation or application of, or improvement to, this concept i.e. integrated into a practical application.⁷

At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law. At some level, “all inventions ... embody, use, reflect, rest upon, or

⁷ *See, e.g., Alice*, 573 U.S. at 223, discussing *Diamond v. Diehr*, 450 U.S. 175 (1981).

apply laws of nature, natural phenomena, or abstract ideas.” Thus, an invention is not rendered ineligible for patent simply because it involves an abstract concept. “[A]pplication[s]” of such concepts “to a new and useful end,” we have said, remain eligible for patent protection.

Accordingly, in applying the § 101 exception, we must distinguish between patents that claim the “buildin[g] block[s]” of human ingenuity and those that integrate the building blocks into something more.

Alice, 573 U.S. at 217 (citations omitted).

Taking the claim elements separately, the operation performed by the computer at each step of the process is expressed purely in terms of results, devoid of implementation details. Steps 1 and 5 are pure data gathering steps. Limitations describing the nature of the data do not alter this. Steps 3, 4, and 10–13 recite basic conventional data operations such as generating, updating, transmitting, and storing data. Steps 2 and 6–9 recite generic computer processing expressed in terms of results desired by any and all possible means and so present no more than conceptual advice. The step 13 recital of “performing . . . an action that initiates the transaction” on its face recites simply initiating rather than performing some action. As such an action is a computer implemented transaction, initiating such an action, as with any computer implemented action, is simply generating some program instruction data for execution. The claim does not even narrow how specific the initiating action is to the nature of the transaction, and encompasses even generic instruction register processing that would necessarily begin any computer code instruction. All purported inventive aspects reside in how the data is interpreted and the results desired, and not in how the process

physically enforces such a data interpretation or in how the processing technologically achieves those results.

Viewed as a whole, Appellant's claim 1 simply recites the concept of managing advertising information by generating a customized ad that induces some transaction based on viewer data and a prior ad as performed by a generic computer. This is no more than conceptual advice on the parameters for this concept and the generic computer processes necessary to process those parameters, and does not recite any particular implementation.

Claim 1 does not, for example, purport to improve the functioning of the computer itself. Nor does it affect an improvement in any other technology or technical field. The Specification only spells out different generic equipment⁸ and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of managing advertising information by generating a customized ad that induces some transaction based on viewer data and a prior ad under different scenarios. It does not describe any particular improvement in the manner a computer functions. Instead, claim 1 at issue amounts to nothing significantly more than an instruction to apply managing advertising information by generating a customized ad that induces some transaction based on viewer data and a prior ad using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 225–26.

⁸ The Specification describes a computation or communication device that is capable of communicating with service provider network. Spec. para. 18.

None of the limitations reflects an improvement in the functioning of a computer, or an improvement to other technology or technical field, applies or uses a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition, implements a judicial exception with, or uses a judicial exception in conjunction with, a particular machine or manufacture that is integral to the claim, effects a transformation or reduction of a particular article to a different state or thing, or applies or uses the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

We conclude that claim 1 is directed to achieving the result of managing advertising information by advising one to generate a customized ad that induces some transaction based on viewer data and a prior ad, as distinguished from a technological improvement for achieving or applying that result. This amounts to commercial or legal interactions, which fall within certain methods of organizing human activity that constitute abstract ideas. The claim does not integrate the judicial exception into a practical application.

STEP 2B

The next issue is whether claim 1 provides an inventive concept because the additional elements recited in the claim provide significantly more than the recited judicial exception.

The introduction of a computer into the claims does not generally alter the analysis at *Mayo* step two.

the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.

Stating an abstract idea “while adding the words ‘apply it’” is not enough for patent eligibility. Nor is limiting the use of an abstract idea “to a particular technological environment.” Stating an abstract idea while adding the words “apply it with a computer” simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere instruction to “implement[t]” an abstract idea “on . . . a computer,” that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of “additional feature[e]” that provides any “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.”

Alice, 573 U.S. at 223–24 (citations omitted).

“[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea [] on a generic computer.” *Alice*, 573 U.S. at 225. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. (*See Spec.*, paragraphs 58–69, 82, Figs. 5, 8E.) Using a computer for receiving, analyzing, transmitting, updating, and generating data amounts to electronic data query and retrieval—one of the most basic functions of a computer. As such an action is a computer implemented transaction, initiating such an action, as with any computer implemented action, is simply generating some program instruction data for execution. All of these computer functions are generic, routine, conventional computer activities that are performed only for their conventional uses. *See Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). *See also In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a

possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming”). None of these activities is used in some unconventional manner nor does any produce some unexpected result. Appellant does not contend it invented any of these activities. In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated upon, “even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” *SAP America, Inc. v. InvestPic LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018).

Considered as an ordered combination, the computer components of Appellant’s claim 1 add nothing that is not already present when the steps are considered separately. (See Spec., paragraphs 16–24, Fig. 2.) The sequence of data reception-analysis-transmission-update-generation is equally generic and conventional. See *Ultramercial*, 772 F.3d at 715 (sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction), *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (sequence of data retrieval, analysis, modification, generation, display, and transmission), *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (sequence of processing, routing, controlling, and monitoring). The ordering of the steps is therefore ordinary and conventional.

We conclude that claim 1 does not provide an inventive concept because the additional elements recited in the claim do not provide significantly more than the recited judicial exception.

REMAINING CLAIMS

Claim 1 is representative. The remaining method claims merely describe process parameters. We conclude that the method claims at issue are directed to a patent-ineligible concept itself, and not to the practical application of that concept.

As to the structural claims, they

are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long “warn[ed] ... against” interpreting § 101 “in ways that make patent eligibility ‘depend simply on the draftsman’s art.’”

Alice, 573 U.S. at 226. As a corollary, the claims are not directed to any particular machine.

LEGAL CONCLUSION

From these determinations we further determine that the claims do not recite an improvement to the functioning of the computer itself or to any other technology or technical field, a particular machine, a particular transformation, or other meaningful limitations. From this we conclude the claims are directed to the judicial exception of the abstract idea of certain methods of organizing human activity as exemplified by the commercial and legal interaction of managing advertising information by advising one to generate a customized ad that induces some transaction based on viewer data and a prior ad, without significantly more.

APPELLANT’S ARGUMENTS

As to Appellant’s Appeal Brief arguments, we have carefully reviewed the Examiner’s determinations and analysis from Final Action 2–7 and Answer 3–16, and, per this review, we adopt the same and reach similar legal conclusions. We now turn to the Reply Brief.

We are not persuaded by Appellant's argument that “the claims are directed to patent-eligible subject matter because the claims improve the associated server and device technology.” Reply Br. 2. To support this, Appellant contends the Specification describes how the invention answers problems of viewer attention by allowing ads on multiple devices. Reply Br. 3. Appellant concludes “sections of the specification discuss one or more solutions directed to improving upon conventional ways of advertising via television technology.” Reply Br. 4. Appellant further concludes that

the claim provides a particular solution to address the technological limitations of conventional advertising via television technology that make it difficult to determine whether a viewer has missed or ignored advertisements that are displayed on television screens because they are looking at screens of other devices while the advertisements are displayed. Reply Br. 5.

Problems of viewer attention are sociological and marketing management problems, not technological problems. Allowing ads on multiple devices is a marketing tactic, not a technological result. Improving upon conventional advertising is an improvement in the marketing arts, not the technological arts. As we determine *supra*, claim 1 recites only generic receiving, analyzing, transmitting, updating, and generating data. The solution is particular only in the sense it is described with particular words. Somehow addressing limitations of conventional advertising with television

technology is not per se providing a technological solution. Instead, it is conceptually responding to the context in which such advertising occurs. None of the limitations recites technological implementation details for any of these steps, but instead recites only results desired by any and all possible means. No technological solution is recited in the claims to the marketing problems the Specification describes. The arguments presented on Reply Brief 5–8 are repetitions of these arguments and are equally unpersuasive.

We are not persuaded by Appellant's argument under the heading “Response to examiner's argument regarding *Affinity Labs*, including claimed features are not similar concepts to the claims at issue in *Affinity Labs*.” Reply Br. 8. This argument refers to *Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266 (Fed. Cir. 2016). The claims in *Affinity Labs* were directed to tailoring of a user interface which the court likened to tailoring of content based on information about the user. *Affinity Labs*, 838 F.3d at 1271. The instant claim is similar in that the ads are tailored to a user and the ads are content.

We are not persuaded by Appellant's argument that

the claim goes beyond merely delivering user-selected media content to portable devices by disclosing, for example, “performing, by element, an action that initiates the transaction associated with the particular item,” as recited in claim 1. These features go above and beyond being “directed to” delivering user-selected media content to portable devices.

Reply Br. 9. First, executing some generic transaction by computer is conventional data processing. This is a conceptual idea for doing so rather than a technological implementation for performing a transaction. Further, as we determine *supra*, the claim recites no more than performing some generic action that only initiates a transaction. Every computer implemented

process is initiated by generating the computer instruction that is the first step in the chain of instructions for the process. Thus, this argued step recites no more than conventional instruction generation.

We are not persuaded by Appellant's argument that the “claimed features are not similar concepts to the claims at issue in *Intellectual Ventures*.” Reply Br. 10 (emphasis omitted). Appellant refers to *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363 (Fed. Cir. 2015). This is the case the court in *Affinity Labs* referred to *supra* as determining that tailoring of content based on information about the user is an abstract idea example. Appellant again argues that the final claim 1 limitation of initiating a transaction adds more to the concept enunciated in *Intellectual Ventures*, and this argument is equally unpersuasive here. Simply adding one ineligible concept to another is insufficient. “Adding one abstract idea . . . to another abstract idea . . . does not render the claim nonabstract.” *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1327 (2017).

Appellant argues that the asserted claims are akin to the claims found patent-eligible in *Finjan, Inc. v. Blue Coat System, Inc.*, 879 F.3d 1299 (Fed. Cir. 2018). Reply Br. 13–17. In *Finjan*, the Court held that claims to a “behavior-based virus scan” were a specific improvement in computer functionality and hence not directed to an abstract idea. 879 F.3d at 1304. The claimed technique of scanning enabled “more flexible and nuanced virus filtering” and detection of potentially dangerous code. *Id.* This was done by “scanning a downloadable and attaching the results of that scan to the downloadable itself in the form of a ‘security profile.’” *Id.* at 1303. The security profile included the information about potentially hostile

operations produced by a “behavior-based” virus scan, as distinguished from traditional, “code-matching” virus scans that are limited to recognizing the presence of previously-identified viruses, typically by comparing the code in a downloadable to a database of known suspicious code. *Id.* at 1304. This behavior-based scan was a new type of file that when attached to a downloadable allowed the computer to do more to protect itself than in the past.

The instant claims present no such new type of processing to create a file that improves computer performance. Instead, the claims are conventional data processing of advertising data. They may improve advertising selection, but this is improving advertising management, not an improvement to the computer or technology.

Appellant further argues that the asserted claims are akin to the claims found patent-eligible in *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018). Reply Br. 13–17. But the Court in *Trading Techs. Int’l, Inc. v. IBG LLC* addressed Appellant’s Core Wireless argument.

Relying principally on *Core Wireless*, TT argues the claimed invention provides an improvement in the way a computer operates. We do not agree. The claims of the ’999 patent do not improve the functioning of the computer, make it operate more efficiently, or solve any technological problem. Instead, they recite a purportedly new arrangement of generic information that assists traders in processing information more quickly.

Trading Techs. Int’l, Inc. v. IBG LLC, 921 F.3d at 1093 (citations omitted). The instant claims do not improve the functioning of the computer, make it operate more efficiently, or solve any technological problem. Instead, they

recite a purportedly new arrangement of generic information that assists users in processing information more quickly.

We are not persuaded by Appellant’s argument that the claims are analogous to those in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). Reply Br. 17–18. The claims differ from those found patent eligible in *Enfish*, where the claims were “specifically directed to a *self-referential* table for a computer database.” 822 F.3d 1327, 1337 (Fed. Cir. 2016). The claims thus were “directed to a specific improvement to the way computers operate” rather than an abstract idea implemented on a computer. *Id.* at 1336. Here, by contrast, the claims are not directed to an improvement in the way computers operate. Though the claims purport to accelerate and more accurately perform the process of ad selection, our reviewing court has held that speed and accuracy increases stemming from the ordinary capabilities of a general purpose computer “do[] not materially alter the patent eligibility of the claimed subject matter.” *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). Instead, the claims are more analogous to those in *FairWarning, supra*, wherein claims reciting “a few possible rules to analyze audit log data” were found directed an abstract idea because they asked “the same questions (though perhaps phrased with different words) that humans in analogous situations detecting fraud have asked for decades.” 839 F.3d at 1094, 1095.

Appellant further argues that the asserted claims are akin to the claims found patent-eligible in *DDR Holdings, LLC v. Hotels.com, L.P.* 773 F.3d 1245 (Fed. Cir. 2014). Reply Br. 18–19. In *DDR Holdings*, the Court evaluated the eligibility of claims “address[ing] the problem of

retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host's website after 'clicking' on an advertisement and activating a hyperlink." *Id.* at 1257. There, the Court found that the claims were patent eligible because they transformed the manner in which a hyperlink typically functions to resolve a problem that had no "pre-Internet analog." *Id.* at 1258. The Court cautioned, however, "that not all claims purporting to address Internet-centric challenges are eligible for patent." *Id.* For example, in *DDR Holdings* the Court distinguished the patent-eligible claims at issue from claims found patent-ineligible in *Ultramercial*. *See id.* at 1258–59 (citing *Ultramercial*, 772 F.3d at 715–16). As noted there, the *Ultramercial* claims were "directed to a specific method of advertising and content distribution that was previously unknown and never employed on the Internet before." *Id.* at 1258 (quoting *Ultramercial*, 772 F.3d at 715–16). Nevertheless, those claims were patent ineligible because they "merely recite[d] the abstract idea of 'offering media content in exchange for viewing an advertisement,' along with 'routine additional steps such as updating an activity log, requiring a request from the consumer to view the ad, restrictions on public access, and use of the Internet.'" *Id.*

Appellant's asserted claims are analogous to claims found ineligible in *Ultramercial* and distinct from claims found eligible in *DDR Holdings*. The ineligible claims in *Ultramercial* recited "providing [a] media product for sale at an Internet website;" "restricting general public access to said media product;" "receiving from the consumer a request to view [a] sponsor message;" and "if the sponsor message is an interactive message,

presenting at least one query to the consumer and allowing said consumer access to said media product after receiving a response to said at least one query.” 772 F.3d at 712. Similarly, Appellant’s asserted claims recite receiving, analyzing, transmitting, updating, and generating data. This is precisely the type of Internet activity found ineligible in *Ultramercial*.

We are not persuaded by Appellant’s argument that the claims contain an inventive concept that is also found in the specific ordered combination of the limitations, similar to the Federal Circuit’s findings in *BASCOM* (*BASCOM Global Internet v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). Reply Br. 18–19; 24–26. Initially, we remind Appellant that *BASCOM* did not find claims eligible on the substance, but rather that the Appellees did not provide sufficient evidence to support a 12(b)(6) motion to dismiss in which facts are presumed in the non-movant’s favor.

The key fact in *BASCOM* was the presence of a structural change in “installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user. This design gives the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server.” *BASCOM*, 827 F.3d at 1350. The instant claims have no analogous structural benefit.

Appellant also attempts to analogize the claims to those involved in *McRO, Inc. v. Bandai Namco Games America Inc.*, *supra*. Reply Br. 21–24. In *McRO*, the court held that, although the processes were previously performed by humans, “the traditional process and newly claimed method . . . produced . . . results in fundamentally different ways.” *FairWarning*, 839 F.3d at 1094 (differentiating the claims at issue from those in *McRO*). In *McRO*, “it was the incorporation of the claimed rules not the

use of the computer, that improved the existing technology process,” because the prior process performed by humans “was driven by subjective determinations rather than specific, limited mathematical rules.” 837 F.3d at 1314 (internal quotation marks, citation, and alterations omitted). In contrast, the claims of the instant application merely implement an old practice of using decision criteria in making advertising decisions in a new environment. Appellant has not argued that the claimed processes of selecting ads apply rules of selection in a manner technologically different from those which humans used, albeit with less efficiency, before the invention was claimed. Merely pigeon holing the objects of decision making in tiers to aid decision making is both old and itself abstract.

The claims in *McRO* were not directed to an abstract idea, but instead were directed to “a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type.” We explained that “the claimed improvement [was] allowing computers to produce ‘accurate and realistic lip synchronization and facial expressions in animated characters’ that previously could only be produced by human animators.” The claimed rules in *McRO* transformed a traditionally subjective process performed by human artists into a mathematically automated process executed on computers.

FairWarning, 839 F.3d at 1094 (differentiating the claims at issue from those in *McRO*).

We are not persuaded by Appellant's argument that rather than responding to Appellant's specific arguments, the Examiner responded with generic conclusory statements as shown above. However, such conclusory statements are non-responsive to Appellant's specific arguments that claim 1 upon the technical field of advertising via television technology because the Examiner's statements fail to rebut as to why the technical field is not improved.

Reply Br. 28. Again, advertising is a marketing rather than a technological field. Advertising in the context of television does not alter this. “The Supreme Court and this court have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract.” *Affinity Labs*, 838 F.3d at 1258. And again, the absence of technological implementations in the claims leaves the claims reciting only conceptual ideas using conventional computer operations.

At that level of generality, the claims do no more than describe a desired function or outcome, without providing any limiting detail that confines the claim to a particular solution to an identified problem. The purely functional nature of the claim confirms that it is directed to an abstract idea, not to a concrete embodiment of that idea.

Affinity Labs, 838 F.3d at 1269.

Appellant cites *Berkheimer* for the proposition that evidence of something being conventional is necessary. *Berkheimer v. HP Inc.*, 881 F.3d1360 (Fed. Cir. 2018). Reply Br. 29–31. Support for this finding is provided under Step 2B *supra*.

CONCLUSIONS OF LAW

The rejection of claims 1, 3–5, 9–14, 16, and 18–26 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more is proper.

CONCLUSION

The rejection of claims 1, 3–5, 9–14, 16, and 18–26 is affirmed.

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1, 3–5, 9–14, 16, 18–26	101	Eligibility	1, 3–5, 9–14, 16, 18–26	

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. § 1.136(a)(1)(iv) (2011).

AFFIRMED