

No.

In the Supreme Court of the United States

ULTRAMERCIAL, LLC AND ULTRAMERCIAL, INC.,
PETITIONERS,

v.

WILD TANGENT, INC.,
RESPONDENT

*ON PETITION FOR A WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT*

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED

Whether computer-implemented or software-based claims, reciting novel or non-routine steps with no conventional counterparts, still cover only patent-ineligible “abstract ideas” as this Court has interpreted 35 U.S.C. § 101?

**PARTIES TO THE PROCEEDING BELOW AND
RULE 29.6 STATEMENT**

All parties to the proceeding below are named in the caption.

Ultramercial, LLC and Ultramercial, Inc. have no parent company and no publicly held company owns 10% or more of their stock.

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PETITION FOR A WRIT OF CERTIORARI

Petitioners, Ultramercial, LLC and Ultramercial, Inc., (“Ultramercial”) respectfully petition for a writ of certiorari to review the judgment of the Court of Appeals for the Federal Circuit in this case.

OPINIONS BELOW

The opinion of the United States Court of Appeals for the Federal Circuit (App. 1a-28a) is reported at 772 F.3d 709 (Fed. Cir. 2014). The two prior decisions of the United States Court of Appeals for the Federal Circuit (App. 30a-69a and 71a-85a), both finding the same patent-at-issue to claim eligible subject matter within the scope of 35 U.S.C. § 101, are reported at 657 F.3d 1323 (Fed. Cir. 2011) and 722 F.3d 1335 (Fed. Cir. 2013). The opinion of the district court (App. 86a-100a) is not reported but is available at 2010 U.S. Dist. LEXIS 93453 (C.D. Cal. Aug. 13, 2010).

JURISDICTION

The court of appeals entered its judgment on November 14, 2014. Ultramercial filed a timely petition for rehearing and rehearing *en banc*. The court of appeals denied rehearing on February 20, 2015, 2015. App. 101a-102a. This petition is filed 90 days of that order. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

STATUTORY PROVISIONS INVOLVED

Pertinent provisions are set out in the appendix to this petition. App. 103a.

INTRODUCTION

Since this nation’s founding, patented inventions, and the businesses they spawned, have driven much of the nation’s growth and economic standing. It did not happen by accident. In giving Congress the power to “promote the Progress of Science and useful Arts, by securing for limited Times to . . . Inventors the exclusive Right to their respective . . . Discoveries[,]” U.S. Const., Art. 1 § 8, the Framers envisioned that innovation, promoted by strong intellectual property rights, would serve as the country’s cornerstone. Congress responded with a robust statutory patent system that secures broad, enforceable patent rights to inventors.

While the patent statutes broadly define what inventions are patentable—“any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvements thereof” (35 U.S.C. § 101)—this Court has created three judicial exceptions for “laws of nature, natural phenomena and abstract ideas.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012). Under this Court’s precedents, claims falling within these categorical exceptions are ineligible for patenting even if they otherwise fit within the scope of § 101 and even if they otherwise would satisfy the other conditions and requirements of the patent statutes.

This Court has addressed one of the categorical exceptions to § 101—“abstract ideas”—in decisions spanning more than 250 years. In addressing “abstractness,”

this Court has long held that a “principle” or an “idea,” *eo ipso*, cannot be patented. *Le Roy v. Tatham*, 55 U.S. 156, 14 How. 156, 174-175, 14 L. Ed. 367 (1853). Thus, mathematical algorithms fall within the “abstract” categorical exception. *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (holding ineligible patent claims involving an algorithm for converting binary-coded decimal numerals into pure binary form). Dressing algorithm claims with conventional pre- or post-solution limitations does not transform ineligible claims into eligible claims. *Parker v. Flook*, 437 U.S. 584, 594-595 (1978) (holding that a claim covering a mathematical formula for computing “alarm limits” is an ineligible abstract idea even when limited to a catalytic conversion process). On the other hand, claims that apply abstract ideas “to a new and useful end” remain eligible for patent protection. *Diamond v. Diehr*, 450 U.S. 175, 187 (1981) (finding a claim covering a method for curing synthetic rubber patent eligible even though the claim recited a heating formula as part of the process).

More recently, applying the “abstract” exception to computer-implemented and software-based inventions has proven particularly divisive. Indeed, when it comes to computer or software-based inventions, both this Court and lower federal courts have been disinclined or unable to define what “abstract” means in the context of § 101. For example, this Court found the Federal Circuit’s “machine or transformation” to be a “useful and important clue” of patent eligibility, *Bilski v. Kappos*, 130 S. Ct. 3218 (2010), but neither the sole test nor, by itself, sufficient to pass eligibility. *Mayo*, 132 S. Ct. at 1301. Rather than define “abstractness” in the context of computer-implemented inventions, this Court has provided a general “framework for distinguishing patents that claim abstract ideas from those that claim patent-

eligible applications of those concepts.” *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014).

The *Alice* framework looks at two questions: “First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts [laws of nature, natural phenomena, and abstract ideas]. If so, we then ask, [w]hat else is there in the claims before us?” *Id.* (quoting *Mayo*, 132 S. Ct. at 1297) (internal citation omitted). For the second question, the framework provides additional guidance—“consider the limitations both individually and as an ‘ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application” as part of a “search for an ‘inventive concept’—i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (quoting *Mayo*, 132 S. Ct. 1289 at 1291, 1294).

While the *Alice* framework provides additional guidance on the “what else” question, answering the first question remains elusive. Not surprisingly, the first question is relatively easy for laws of nature and natural phenomena. Not so for abstract ideas—particularly in the context of computer-implemented and software-based inventions. In both *Alice* and *Bilski* this Court declined “to delimit the precise contours of the ‘abstract ideas’ category” beyond holding that claims covering an “intermediated settlement” and “risk hedging,” even when implemented on a computer or within a computer network, are ineligibly abstract. *Alice*, 134 S. Ct. at 2357. With this, both *Alice* and *Bilski* make plain that claims directed to “fundamental economic practice[s] long prevalent in our system of commerce,” *id.* at 2356, fall outside the scope of patent eligibility even when implemented on a computer. Accordingly, under this Court’s precedents,

mathematical algorithms and fundamental or longstanding conventional practices are abstract in nature—and they cannot be patented by implementing them on a computer or within a computer network. Conversely, it stands to reason that claims reciting novel or non-routine steps with no conventional counterparts, such as claims rooted in computer technology or addressing computer or network-centric problems, would remain outside the “abstract idea” categorical exception. With this distinction, there is little risk of the “abstract idea” exception to patentability “swallow[ing] all of patent law.” *Id.* at 2354.

The court below reached the opposite conclusion. In finding the claims of Ultramercial’s ’545 patent “abstract”—after twice confirming that the patent satisfied § 101 (the second time applying this Court’s *Mayo* guidelines)—the Federal Circuit found that the inclusion of “novel or non-routine components” to a claimed invention does not “necessarily turn[] an abstraction into something concrete.” App. 11a-12a. Indeed, the Federal Circuit found “any novelty in implementation of the idea” relevant only to the second “what else” question under the *Alice* guidelines. App. 12a. But once a computer-implemented or software-based claim is affixed with the “abstract” label under *Alice* step 1, any recited novelty in how the computer implements the invention can be easily dismissed under step 2 as “insignificant ‘[pre]-solution activity’” and “‘data gathering steps’”—just as the Federal Circuit did here. App. 13a (quoting *Mayo*, 132 S. Ct. at 1298 and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011)). *See also* App. 14a (“That some of the eleven steps were not previously employed in this art is not enough—standing alone—to confer patent eligibility upon the claims at issue.”). Taken to its logical conclusion, if computer-based claims recit-

ing novel or non-routine steps with no conventional counterparts, such as claims addressing computer or network-centric problems, still fall outside § 101 as too “abstract,” much of the computer network innovation (including Internet-based inventions) that has been researched and developed over the past 20 years would be patent ineligible.

Not surprisingly, *Ultramercial’s* holding that claims reciting “novel or non-routine components” can still be ineligible abstract has caused havoc in lower federal courts. Lower courts have cited the decision as the basis for invalidating an alarming 75% of all computer-implemented and software-based patents challenged under § 101. This includes patent claims reciting new and useful computer-based innovations, as opposed to merely implementing on a computer known, fundamental, and routine economic or commercial practices. While the impact of these decisions on innovation in computing and networking (along with corresponding business investments) cannot be quantified, it undoubtedly will be felt for years. This Court should grant certiorari to bring much-needed clarity to the first *Alice* question—what is an abstract idea—before the current application in the lower courts, at least as to computer-implemented inventions, swallows most, if not all of patent law.

Certiorari is warranted for another reason. Just weeks after holding that claims reciting “novel or non-routine components” can still be ineligibly abstract, a different panel reached the opposite conclusion. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). Unlike the *Ultramercial* panel, the *DDR Holdings* panel upheld computer-implemented claims under § 101, finding the claims sufficiently concrete, largely because they did not “recite a fundamental economic or longstanding commercial practice” already

known “from the pre-Internet world.” *Id.* at 1257, 1259 (finding patent eligible a computer-implemented invention for keeping users on a host website by retrieving data from other websites and displaying the data with the same “look and feel” as the host site). *Ultramercial* and *DDR Holdings* cannot be squared. While neither patent claimed new networking or computer technology, both inventions recited non-routine components to solve network-centric problems—as opposed to claiming fundamental economic or longstanding commercial practice on a computer network. Certiorari is needed and warranted to resolve this split within the Federal Circuit.

STATEMENT OF THE CASE

In two rounds of review, the Federal Circuit twice rejected (without a single dissent) the district court’s finding that the *Ultramercial* patent claimed the “abstract idea” of using “advertising as currency” employed “over the Internet” or “on a computer.” Instead, the court twice found the claims patentable because the claimed method requires “intricate and complex computer programming,” “an extensive computer interface,” meaningful “pre- [and] post-solution” activity, and sufficient particularity to avoid “preempt[ing] the use of th[e] idea in all fields”—a result of the claim’s “eleven separate and specific steps with many limitations and sub-steps in each category.” In the third round of review, the court *still* confirmed that the patent recited “novel or non-routine components,” but this time found those components irrelevant to whether the claims were directed to an abstract idea. This last decision extends the Court’s categorical exception to § 101 for “abstract ideas,” well beyond this Court’s precedents. It also squarely implicates a question left open in *Alice*: Can the abstract idea

exception to § 101 extend to computer network and software-based claims, reciting novel or non-routine steps with no conventional counterparts?

In the past, respondent and its amici have firmly declared that “Ultramercial presents an ‘unusually good vehicle’ in which to address the scope of § 101 for computer-related claims.” This vehicle should be used now to answer the critical question left open in *Alice*.

A. The Parties

Ultramercial is the owner of U.S. Patent No. 7,346,545 ('545 patent). It is a technology company offering online advertising services to businesses. Ultramercial provides consumers authorized access to copyrighted content (and other protected intellectual property) through the Internet, without charge, in exchange for viewing sponsored advertising. Ultramercial's unique services allow the consumer to *choose* between purchasing media content outright or accessing that content for free in exchange for accepting a complete sponsored message (including at times interacting with the sponsored content). Once the consumer interacts and navigates to the completion of the sponsored message, the consumer ends the message by affirmatively signaling the host computer, causing the media content to be unlocked and allowing the consumer to access to the content without charge. Ultramercial's advertising services are a commercial embodiment of the '545 patent, which Ultramercial owns by assignment.

Petitioner WildTangent is a global games network, delivering a catalog of more than 700 downloadable games to the public through its website. Petitioner claims to have more than 20 million monthly users in the United States alone. Petitioner offers a variety of ways to enjoy games provided through its website. Users may purchase premium games, pay on a per-session basis

with WildCoins, or engage with sponsored advertising to play at no cost. In exchange for watching a sponsored message, the user can access the game content for free. Petitioner’s website labels this advertising method “Sponsored Sessions.”

B. The Ultramercial Invention

Online piracy has plagued the Internet since its inception. With the ability to access digital content online, copyright owners lacked any reliable way of securing their works in the digital age. Equally troubling, online users were often left unsure whether their access to web-based content would result in civil liability for copyright infringement—or even criminal liability.

1. Ultramercial’s ’545 patent offers a novel solution unique to the online environment. It allows content owners to make their copyrighted works (music, videos, literature, and games) available to Internet users for purchase or, alternatively, at no charge if the consumer first views or interacts with a paired advertiser’s message. To accomplish this, the claims of the ’545 patent recite steps that block Internet users from accessing copyrighted content stored on web servers without first fully viewing paid advertisements electronically paired to the content. As explained in the patent, a “facilitator” obtains IP-protected content from an owner, makes that content available for distribution on a web server, gates the content with a paired advertisement from a sponsor on the web server, and programs the web server so that an Internet user can either purchase the content or obtain access only after affirmatively starting and then completely viewing the advertisement and performing any required interaction. Thus, the invention is not only rooted in web-server technology, but the claims “address Internet-centric challenges” in a way that departed from

previously known routine and conventional web-server uses. *DDR Holdings*, 773 F.3d at 1259.

Each claim of the '545 patent recites at least eleven separate, specific steps. These steps can be implemented only through a web server programmed in a particular manner to (i) store content capable of download by computer users, but (ii) block access to that content until the requesting user actively *chooses* to either purchase the content or *chooses* (*i.e.*, signals a request) to view a specified advertisement and completes any required interaction with that advertisement. These specific steps, tailored to the online environment, did not capture all forms of advertising, and certainly do not preempt the entire concept of using advertising as currency.

Ultramercial's invention improved prior forms of online content distribution and advertising, most of which themselves are protected by patents. First, content owners are paid for their works, reducing instances of Internet piracy. Second, advertisers can more accurately target consumers by pairing messages with particular content. By locking desired content until the sponsored message has been viewed in full, the advertiser further increases the probability that the consumer will view the entire paired message—improving exposure over other online advertising methods, such as passive banner advertising. Finally, users avoid liability for illegal downloads and receive high-quality content.

2. In 2006, prior to implementing Sponsored Sessions, WildTangent approached Ultramercial regarding advertising solutions. Over the next several months, Ultramercial and WildTangent discussed the use of Ultramercial's patent-pending services. Ultramercial prepared demonstrations of its services under a nondisclosure agreement, and Ultramercial provided WildTangent with proprietary information on the operation of its

patent-pending technology. After WildTangent retained Ultramercial’s services, Ultramercial launched an advertising campaign on WildTangent’s behalf using web servers programmed with Ultramercial’s proprietary software. The web servers, as programmed, allowed WildTangent’s users to play games for free in exchange for watching sponsored advertising. Several months later, WildTangent stopped working with Ultramercial but continued to use the same advertising service that Ultramercial had implemented—calling the service “Sponsored Sessions.” Subsequently, Ultramercial filed this action alleging infringement of the ’545 patent.

C. The Patent Act

The Patent Act broadly defines patent eligibility to include “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101 (reprinted at 103a). The definition of “process” in the Patent Act is equally broad: a “process, art or method, and includ[ing] a new use of a known process, machine, manufacture, composition of matter, or material.” 35 U.S.C. § 100(b) (reprinted at 103a).

D. Proceedings Below

1. Ultramercial filed this action on September 23, 2009. The district court quickly dismissed the case under Fed. R. Civ. P. 12(b)(6), finding that the claims of the ’545 patent did not cover patentable subject matter. App. 86a-100a. The district court did so without construing any claim terms or making any other factual or legal determinations regarding the claims’ scope. Instead, the district court found that the claims failed the “machine or transformation test,” which this Court rejected as a sole “bright line test” for patent-eligible subject matter in *Bilski v. Kappos*, 130 S. Ct. 3218 (2010). The district

court also held that the '545 patent discloses only an abstract idea by focusing exclusively on the “basic idea” at the “core” of the '545 patent—“that one can use advertisements as an exchange or currency”—without examining each limitation to determine the extent to which any claim would actually cover the entire concept of “using advertising as currency.” App. 98a. Indeed, without any explanation, and without acknowledging that no claims even recite the “core” concept of “using advertising as currency” in a limitation, the district court concluded that the claims necessarily preempt all uses of that “core” concept: “If the claimed invention here were patentable, it would ‘preempt use of this [method] in all fields.’” App. 99a (citing *Bilski*, 130 S. Ct. at 3231).

2. The Federal Circuit reversed. Invoking this Court’s precedents, the circuit concluded that the claims of the '545 patent were not impermissibly abstract. App. 72a. First, the court rejected the factual assertion that the '545 patent merely claimed “the age-old idea that advertising can serve as currency.” *Id.* at 81a. Instead, after examining the specification and claims, the court concluded that the '545 patent covered a “practical application” of an advertising idea through “an extensive computer interface” that requires “complex computer programming.” *Id.* Second, the court rejected respondent’s argument that “the software programming necessary to facilitate the invention * * * amounts to abstract subject matter,” finding instead that the computer programming needed to implement the claims of the '545 patent creates a non-abstract “special purpose computer.” *Id.* at 82a (quoting *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994)). Finally, the court rejected respondent’s argument that the Ultramercial invention improperly claimed a mathematical algorithm or a series of purely mental steps; it instead found that the claims “re-

quire, among other things, controlled interaction with a consumer via an Internet website.” *Id.* at 84a (distinguishing *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (Fed. Cir. 2011)).

3. The Federal Circuit denied *en banc* review, but respondent ultimately sought review in this Court. The Court granted the petition, vacated the judgment, and remanded to the Federal Circuit “for further consideration in light of *Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 132 S. Ct. 1289 (2012).” App. 70a.

4. In the intervening period, the Federal Circuit issued its *en banc* decision in *CLS Bank*. That case failed to produce a majority opinion, and it deeply fractured the Court on the application of § 101 to software patents. As a leading plurality opinion, Judge Lourie advocated a test that focused on the risk of preemption and searched for meaningful limitations added to any abstract idea. Chief Judge Rader, by contrast, wrote an opinion advocating a test that focused on whether a claim covers the *application* of an abstract idea, rather than the idea itself.

5. In a reconstituted panel with both Chief Judge Rader and Judge Lourie, the Federal Circuit, again unanimously, held on remand that the ’545 patent covers a “‘process’ within the language and meaning of 35 U.S.C. § 101.” Pet. App. 30a-31a. The panel studiously analyzed the ’545 patent in light of *Mayo* and this Court’s past precedents, and concluded that the claims were not impermissibly “abstract.” In a majority opinion, the panel examined this Court’s precedents for guideposts in applying the abstractness exception to § 101 for computer-implemented inventions. App. 48a-55a. While the majority confirmed that mere reference to a general-purpose computer will not meaningfully limit an ineligible abstract idea, claims tied to “a specific

way of doing something with a computer, or a specific computer for doing something,” may be patent eligible. *Id.* at 56a-57a. In such cases, the computer will play a “meaningful role in the performance of the claimed invention,” such that the claim is “not likely to pre-empt virtually all uses of an underlying abstract idea.” *Id.* at 57a.

Applying these principles, the panel determined that the claims of the ’545 patent were not abstract. It disagreed with WildTangent’s characterization of the claims as limited to “the age-old idea that advertising can serve as currency.” *Id.* at 58a. The panel examined the specification and viewed the claims as a whole, and concluded that the claims require an extensive computer interface. *Id.* at 63a. It also confirmed that the claim possessed multiple limitations that were not “inherent in the idea of monetizing advertising.” *Id.* at 65a. Instead, these limitations reflect “a practical application of the general concept of advertising as currency and an improvement to prior art technology.” *Id.* at 66a.

Judge Lourie concurred in the judgment. App. 67a-69a. He agreed that the claims of the ’545 patent were not impermissibly abstract. *Ibid.* Looking to *Mayo* and reciting principles from his plurality opinion in *CLS Bank*, Judge Lourie framed the abstractness analysis as asking “whether the claim poses ‘any risk of preempting an abstract idea.’” *Id.* at 67a-68a (citing *CLS Bank*, 717 F.3d at 1282). This requires courts to “first identify and define whatever fundamental concept appears wrapped up in the claim,” then evaluate whether the balance of the claim contains “additional substantive limitations” that “narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself.” *Id.* at 68a (internal quotation marks omitted). Under this framework (which parallels the frame-

work later described in *Alice*), Judge Lourie readily concluded that the limitations of the '545 patent “narrow, confine, or otherwise tie down” the claims to avoid covering the full abstract idea of using advertising as consideration or currency. *Id.* at 69a. Those limitations, he found, “represent significantly more than the underlying abstract idea of using advertising as an exchange or currency and, as a consequence, do not preempt the use of that idea in all fields.” *Id.*

6. The Federal Circuit again denied *en banc* review, but respondent again sought review in this Court. After deciding *Alice*, the Court granted the petition, vacated the judgment, and remanded to the Federal Circuit “for further consideration in light of *Alice Corp. v. CLS Bank Int'l*, 573 U. S. ___, 134 S. Ct. 2347, 189 L. Ed. 2d 296 (2014).” App. 29a.

7. On remand, a Federal Circuit a panel (comprising two of the original three judges¹), in an opinion by Judge Lourie, reached the opposite conclusion. App. 1a-3a. Without discussing any of its prior opinions (including the factual analysis of the '545 patent discussed in those opinions), the panel changed its view of the claims, finding that the combined steps have “no particular concrete or tangible form” but rather “simply instruct the practitioner to implement the abstract idea with routine, conventional activity.” *Id.* at 12a. While recognizing that the claims recite restricting public access to content offered on a website until a consumer makes a request to view a paired advertisement and complies with any interactive requirements (unlike existing mechanisms for accessing content and advertising over the Internet), the

¹ In the interim period, Chief Judge Rader resigned from the court and was replaced on the panel by Judge Mayer.

panel held that “merely novel or non-routine components” in a claim were not enough to “turn[] an abstraction into something concrete.” *Id.* at 11a-12a. Further contrary to its prior analysis, the panel determined that “the claimed sequence of steps comprises only ‘conventional steps, specified at a high level of generality,’” and tied “only to a general purpose computer.” *Id.* at 13a (quoting *Alice*, 134 S. Ct. at 2355). Although the panel previously viewed the patent’s critical steps as requiring “intricate and complex computer programming,” and “an extensive computer interface,” it now declared that those steps could be disregarded as “insignificant data-gathering . . . and [pre]-solution activity.” *Id.* (internal citations omitted).

8. The court of appeals denied Ultramercial’s timely petition for rehearing and rehearing en banc. App. 101a.

REASONS FOR GRANTING THE PETITION

Alice left unresolved the question of whether computer-implemented or software-based inventions satisfy § 101 by reciting steps that go beyond merely routine or conventional uses of the Internet, using networked computers to accomplish tasks unknown in the pre-Internet world. Ultramercial’s patent limited the broad concept of “using advertising as currency” through groundbreaking steps, but the Court still declared the claims abstract. The decision is inconsistent with *Alice* and this Court’s other precedents applying the abstract idea categorical exception to patentable inventions under § 101. In short, the decision sweeps too far—jeopardizing a broad array of computer-based inventions.

The court’s decision also reflects a split within the Federal Circuit. Within several weeks, two Federal Circuit panels issued conflicting and irreconcilable decisions applying the *Alice* framework to computer-implemented

patent claims. In the decision below, the court expressly rejected Ultramercial’s contention that the claims’ “novel or non-routine components” sufficed the requirement for patentable inventions under § 101. App. 11a-12a. Even though the claims plainly did not take any form of conventional advertising (or any other “fundamental economic practice long prevalent in our system of commerce,” *Alice*, 134 S. Ct. at 2356), and simply apply it to a computer or the Internet, the court still found the claims ineligible “abstract” and outside § 101. Conversely, a different panel found computer-implemented claims patent-eligible because they “recite an invention that is not merely the routine or conventional use of the Internet.” *DDR Holdings*, 773 F.3d at 1259. Review is needed to resolve the Federal Circuit’s internal conflict and maintain uniformity on a question of exceptional importance.

I. THE DECISION BELOW EXTENDS THE CATEGORICAL EXCEPTION TO § 101 FOR “ABSTRACT IDEAS” WELL BEYOND ALICE AND THIS COURT’S OTHER § 101 PRECEDENTS

The panel’s invalidation of Ultramercial’s patent narrows the scope of patent-eligibility under § 101 far beyond this Court’s precedents. In *Gottschalk v. Benson*, 409 U.S. 63 (1972), and *Parker v. Flook*, 437 U.S. 584 (1978), this Court found computer-based mathematical operations—converting binary-coded decimals into pure binary form and updating alarm limits in a catalytic conversion process—ineligibly abstract. Later, in *Bilski*, this Court found abstract a computer-based method for hedging against the financial risk of price fluctuations. 130 S. Ct. at 3223. In *Alice*, this Court found abstract a computer-implemented invention for an intermediated settlement of financial transactions. 134 S. Ct. at 2355. Each of these cases concerned patents that shared a

common characteristic: the claim elements (alone or in combination) covered performing, on a computer, well-known, conventional rules or fundamental, routine economic practices, and lacked any innovation beyond applying those known ideas to a stand-alone or networked computer.

In stark contrast, the Federal Circuit twice held that Ultramercial’s claims recite more than the age-old idea of using advertising as currency. Ultramercial crafted a specific method of limiting access to online content until a user pays for that content or (by election) views in full a paid advertisement paired to content (and completes any interactive steps). This practice sharply departed from conventional advertising in the brick-and-mortar context. It offered a solution unique to the technological environment of networked computers.

Even within the online environment, Ultramercial’s solution was counter-conventional: Before the ’545 patent, Internet advertising focused on surrounding content, and was entirely passive in nature (*e.g.*, banner advertisements). It was a dramatic shift to electronically pair content with an advertisement, and block access to the content until a user affirmatively selected and viewed the advertisement—requiring active involvement (including the possibility of responding to specific prompts) that was the exact opposite of “fundamental” advertising through passive messages on a webpage or during a program without anyone’s affirmative selection or choice.

The decision invalidating Ultramercial’s patent squarely implicates the question of patent eligibility for computer-implemented and software-based inventions reciting new methods—as opposed to claims that merely seek to capture Internet rights to fundamental, traditional, or routine practices. *Alice* and its predecessors sensibly limited ineligible abstract ideas to claims cover-

ing “fundamental,” “conventional,” “prevalent,” “basic,” “well-known,” “long standing” practices and the core “building block[s]” of “human ingenuity”—those things that (if patentable) would “risk disproportionately tying up the use of the underlying’ ideas.” 134 S. Ct. at 2354-55. Cautioning that “all inventions” at some level may “embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,” *Alice* confirmed that “[a]pplications of such concepts ‘to a new and useful end,’ . . . remain eligible for patent protection.” *Id.* at 2354 (quoting *Mayo*, 132 S. Ct. at 1293, and *Benson*, 409 U.S. at 67). Ultramercial’s invention is the opposite of “well-understood, routine, [or] conventional,” *id.* at 2359, which is exactly why it proved a new and successful means of operating commercial websites.

By sweeping Ultramercial’s innovation within the realm of abstractness, the Federal Circuit fundamentally changed the scope of this Court’s abstract idea exception to § 101 patent eligibility. Unless the Court now resolves the question left open in *Alice*—§ 101’s applicability to computer-implemented and software-based inventions reciting more than fundamental, traditional, or routine practices—the decision below threatens countless computer and software-based patents, despite this Court’s careful reservation that such patents, crucial to the national economy, remain worthy of protection. 134 S. Ct. at 2354; *Bilski*, 130 S. Ct. at 3228-29.²

² In the Internet advertising field alone, a Google patent search returned nearly 400 patents issued between 1994 and 2014 using the terms “Internet” and “advertisement.”

II. THE FEDERAL CIRCUIT IS SPLIT ON THE QUESTION LEFT OPEN IN *ALICE*

The *Ultramercial* panel’s decision —finding the ’545 patent invalid under § 101 despite reciting steps that go beyond known uses in the conventional, pre-Internet world—is irreconcilable with another Federal decision, issued just weeks later, in *DDR Holdings*, 773 F.3d at 1245. In *DDR Holdings*, the panel held that the claims at issue “stand apart because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet.” *Id.* at 1257; *see also id.* at 1259 (“When the limitations of the ’399 patent’s asserted claims are taken together as an ordered combination, the claims recite an invention that is not merely the routine or conventional use of the Internet.”).

Comparing *Ultramercial*’s claims to *DDR Holding*’s claims reveals no articulable basis for finding one claim patent-eligible and the other abstract. Both recite a method requiring the use of a web server connected to the Internet. Both contain steps for accessing web-based content. Both transmit and display content upon user-activation of web-based commands. And both require a connection between the content of two separate parties (the copyright holder and advertiser in *Ultramercial* and the webhost and merchant in *DDR Holdings*). While both patents must be implemented on a programmed web server, neither contains limitations describing the particular programming needed to accomplish the recited steps, or how the necessary programming would physically operate on the computer or network. Indeed, neither patent purports to invent new computing or networking technology to carry out the recited claims. To the contrary, both inventions rely on

programming techniques well-known in the computing and networking arts.³

The conflict between these two decisions leaves the post-*Alice* § 101 jurisprudence unsound in principle and unworkable in practice. For example, the *Ultramercial* decision found no patentable substance in the patent’s programming-centric third and fourth steps (providing a media product for sale on a website and—contrary to conventional practice—restricting access with a paired advertisement) as “insignificant [pre]-solution activity.” 772 F.3d at 716. In contrast, *DDR Holdings* cited programming-based steps as “specify[ing] how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.” 773 F.3d at 1258. Without further guidance from this Court as to when programming-based limitations (alone or in combination) are insignificant versus concrete, these decisions will continue generating confusion for both lower courts and the public. *See, e.g.,* David Stein, *DDR Holdings, Inc. v. Hotels.com: Scoring the CAFC Split*, at <http://www.usptotalk.com> (Dec. 10, 2014).

III. INTERVENTION IS NEEDED TO AVOID HARM TO COMPUTER AND NETWORK-IMPLEMENTED INNOVATION

The importance of software and the effect it has had on industry is undeniable. Today, “Uber, the world’s

³ The programming used in *DDR Holdings* has been experienced by anyone who, over the past 15 years, clicked on a webpage link and ended up at a webpage that differed from the expected or intended destination webpage. There is even a longstanding name for some computer programs that do this—“malware.” *See* “malware definition” at techterms.com.

largest taxi company, owns no vehicles. Facebook, the world's most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world's largest accommodation provider, owns no real estate." Tom Goodwin, *The Battle is For the Customer Interface*, available at <http://techcrunch.com> (Mar. 3, 2015). Evidently, the value in these companies is not in the products. The value rather is in the software interface that is used to interact with customers and offered in a virtual marketplace based on a global network—namely, the Internet. Companies like the above, and more notably IBM, Microsoft, Google, and Amazon, seek to protect their business assets with patents. See 2014 Top 50 US Patent Assignees, available at <http://www.ificlaims.com/> (Jan. 29, 2015) (naming IBM, Microsoft, Google, and Amazon as leading patent assignees in 2015 with each company earning 7,534, 2,829, 2,566, and 745 patents respectively). The vast bulk of patents these companies seek (and the Patent Office awards) undoubtedly are computer-implemented and software-based patents.

Despite the significance of software to innovation and the value in which businesses have placed on protecting computer-implemented inventions (at least since the Federal Circuit's decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998) (upholding the validity under § 101 of a patent for a computerized accounting system for managing mutual funds)), uncertainty remains post-*Alice* as courts still struggle with the basic notion of whether software is patent eligible subject matter.

Prior to *Alice*, critics labeled the patent eligibility standard as applied to software, and in particular, the test to determine abstract ideas “unworkable.” *E.g.*, Brief for IBM as Amicus Curiae, p. 2, *Alice Corp. v. CLS*

Bank Int'l, 134 S. Ct. 2347 (2014). These critics cautioned against a “muscular application of the abstract idea doctrine” because all inventions cover some level of abstractness. *Id.* at 5. The concern was that a muscular application of the doctrine coupled with the misplaced rationale that “software is [merely] performing what a human does only faster” and that software merely embodies mathematical functions would doom all software-related patents. See Emily Lee, Software Patent Eligibility: A Call for Recognizing and Claiming Concrete Computer Programs, 95 J. Pat. & Trademark Off. Soc’y 402, 405 (2013). But software is actually concrete and not abstract. *Id.* (“A computer program is a concrete process and is different from a human instruction. . . . The act of programming is translating real-world tasks into computer-executable form. . . . By and large, the root of the complexity in developing software isn’t related to the role it’s supposed to perform—usually this is a well-defined, real-world process. Rather, it stems from the mapping of real-world tasks onto computer-executable models. And this mapping is performed in the context of programming languages and tools.”) (internal quotations and citation omitted). Thus, critics called for “[c]lear rules governing patent eligibility” and asked the Court to consider distinguishing “between efforts to occupy a field by simply taking a well-known abstract idea and articulating a few generic steps to implement it on a computer, and true innovations that unlock the potential of computers.” IBM’s Amicus Br. in *Alice* at 11, 13.

While articulating a two-step framework, *Alice* did not cure the “unworkable” application of the patent eligibility standard. “Abstract idea” was left undefined. Leaving open the contours of “abstract ideas,” has resulted in a “muscular application” of the abstract idea doctrine in some cases (*Ultramerical*) and not in others

(*DDR Holdings*). As one district court noted: “the two-step test may be more like a one step test evocative of Justice Stewart’s most famous phrase. . . . I know it when I see it.” *McRO, Inc. v. Activision Publ., Inc.*, 2014 U.S. Dist. LEXIS 135152, at *12 (C.D. Cal. Sept. 22, 2014) (internal quotation marks and citation omitted). The same district court further stated that “[r]est and relaxation prevailed in *Alice* because [rather than applying the articulated test] it was enough [for the Court] to recognize that there is no meaningful distinction between the concept of risk hedging in *Bilski* and the concept of intermediated settlement at issue [in *Alice*].” *Id.* at 13. Accordingly, the district court found no guidance for how the “two-part test” should apply. *Id.* (finding “limited utility [with the two part test] while comparisons to previously adjudicated patents . . . have done the heavy lifting” in determining patent eligibility). Regarding the Court’s “comparison” method, commentators have opined that the method may be “abstract” in and of itself. Erik Paul Belt, *Alice Doesn’t Live Here Anymore: A Critique of the Supreme Court’s “Abstract Ideas” Test*, 45(3) Boston Patent Law Association Newsletter (2015), available at <http://www.bpla.org> (criticizing the “*Bilski* comparison method” because the method is “itself abstract and thus unsatisfying.”). The patent eligibility standard remains “unworkable.”

Without guidance from the Court as to the contours of “abstract ideas,” computer implemented innovation may not withstand the undeserving scrutiny it is facing at this time. The costs of continued uncertainty in this area will be to the detriment of innovation as well as investment in new, innovative businesses, developing ever more uses for computers and networking technology, and needing protection for their innovations to continue doing so.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted.

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APPENDIX

APPENDIX

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APPENDIX A

**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

2010-1544

[Filed November 14, 2014]

ULTRAMERCIAL, INC., AND)
ULTRAMERCIAL, LLC,)
Plaintiffs-Appellants,)
)
v.)
)
HULU, LLC,)
Defendant,)
)
AND)
)
WILDTANGENT, INC.,)
Defendant-Appellee.)

Appeal from the United States District Court for the
Central District of California in No. 09-CV-6918, Judge
R. Gary Klausner.

Decided: November 14, 2014

LAWRENCE M. HADLEY, McKool Smith Hennigan,
P.C., of Los Angeles, California, for plaintiffs-
appellants.

GREGORY G. GARRE, Latham & Watkins LLP, of Washington, DC, for defendant-appellee. With him on the supplemental brief were GABRIEL K. BELL, of Washington, DC, and RICHARD G. FRENKEL and LISA K. NGUYEN, of Menlo Park, California. Of counsel were RICHARD P. BRESS and Katherine I. Twomey, of Washington, DC.

CHARLES DUAN, Public Knowledge, of Washington, DC, for amicus curiae Public Knowledge.

DANIEL NAZER, Electronic Frontier Foundation, of San Francisco, California, for amicus curiae Electronic Frontier Foundation. With him on the brief was VERA RANIERI. Of counsel was JULIE P. SAMUELS.

DARYL L. JOSEFFER, King & Spalding LLP, of Washington, DC, for amicus curiae Google Inc. With him on the brief was ADAM M. CONRAD, of Charlotte, North Carolina.

JAMES L. QUARLES III, Wilmer Cutler Pickering Hale and Dorr LLP, of Washington, DC, for amicus curiae The Clearing House Association, L.L.C. With him on the brief were GREGORY H. LANTIER, THOMAS G. SAUNDERS, and DANIEL AGUILAR.

Before LOURIE, MAYER,* and O'MALLEY,
Circuit Judges.

* Pursuant to Fed. Cir. Internal Operating Procedure 15 ¶ 2 (Nov. 14, 2008), Circuit Judge Mayer was designated to replace Randall R. Rader, now retired, on this panel.

Opinion for the court filed by *Circuit Judge* LOURIE.

Concurring Opinion filed by *Circuit Judge* MAYER.

LOURIE, *Circuit Judge*.

This appeal has returned to the court following an up and down journey to and from the Supreme Court. In our original decision, we reversed the district court's holding that granted WildTangent, Inc.'s ("WildTangent") motion to dismiss Ultramercial, LLC and Ultramercial, Inc.'s (collectively "Ultramercial") patent infringement complaint under Fed. R. Civ. P. 12(b)(6). *See Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323 (Fed. Cir. 2011), *vacated sub nom. WildTangent, Inc. v. Ultramercial, LLC*, 566 U.S. ___, 132 S. Ct. 2431 (2012). The district court had held that U.S. Patent 7,346,545 (the "'545 patent"), the basis for the complaint, does not claim patent-eligible subject matter under 35 U.S.C. § 101. *See Ultramercial, LLC v. Hulu, LLC*, No. 09-06918, 2010 WL 3360098 (C.D. Cal. Aug. 13, 2010)

The present posture of the case is that Ultramercial is again appealing from the decision of the United States District Court for the Central District of California. Upon review of the '545 patent and the standards adopted by the Supreme Court, for the reasons set forth below, we conclude that the '545 patent does not claim patent-eligible subject matter and accordingly affirm the district court's grant of WildTangent's motion to dismiss.

BACKGROUND

Ultramercial owns the '545 patent directed to a method for distributing copyrighted media products

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over the Internet where the consumer receives a copyrighted media product at no cost in exchange for viewing an advertisement, and the advertiser pays for the copyrighted content. Claim 1 of the '545 patent is representative and reads as follows:

A method for distribution of products over the Internet via a facilitator, said method comprising the steps of:

a first step of receiving, from a content provider, media products that are covered by intellectual property rights protection and are available for purchase, wherein each said media product being comprised of at least one of text data, music data, and video data;

a second step of selecting a sponsor message to be associated with the media product, said sponsor message being selected from a plurality of sponsor messages, said second step including accessing an activity log to verify that the total number of times which the sponsor message has been previously presented is less than the number of transaction cycles contracted by the sponsor of the sponsor message;

a third step of providing the media product for sale at an Internet website;

a fourth step of restricting general public access to said media product;

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a fifth step of offering to a consumer access to the media product without charge to the consumer on the precondition that the consumer views the sponsor message;

a sixth step of receiving from the consumer a request to view the sponsor message, wherein the consumer submits said request in response to being offered access to the media product;

a seventh step of, in response to receiving the request from the consumer, facilitating the display of a sponsor message to the consumer;

an eighth step of, if the sponsor message is not an interactive message, allowing said consumer access to said media product after said step of facilitating the display of said sponsor message;

a ninth step of, 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;

a tenth step of recording the transaction event to the activity log, said tenth step including updating the total number of times the sponsor message has been presented; and

an eleventh step of receiving payment from the sponsor of the sponsor message displayed.

'545 patent col. 8 ll. 5–48. As the other claims of the patent are drawn to a similar process, they suffer from the same infirmity as claim 1 and need not be considered further.

As indicated above, Ultramercial sued Hulu, LLC (“Hulu”), YouTube, LLC (“YouTube”), and WildTangent, alleging infringement of all claims of the '545 patent. *Ultramercial*, 2010 WL 3360098, at *1. Hulu and YouTube were dismissed from the case for reasons we need not concern ourselves with here, *Ultramercial*, 657 F.3d at 1325, but WildTangent moved to dismiss for failure to state a claim, arguing that the '545 patent did not claim patent-eligible subject matter. *Ultramercial*, 2010 WL 3360098, at *2. The district court granted WildTangent’s pre-answer motion to dismiss under Rule 12(b)(6) without formally construing the claims. *Id.* at *6–7. Ultramercial timely appealed.

We reversed, concluding that the district court erred in granting WildTangent’s motion to dismiss for failing to claim statutory subject matter. *See Ultramercial*, 657 F.3d at 1330. WildTangent then filed a petition for a writ of certiorari, requesting review by the Supreme Court. The Supreme Court granted the petition, vacated our decision, and remanded the case for further consideration in light of its decision in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. ___, 132 S. Ct. 1289 (2012). *WildTangent*, 132 S. Ct. 2431.

On remand, we again reversed, concluding that the district court erred in granting WildTangent’s motion to dismiss for failing to claim statutory subject matter. *See Ultramercial, LLC v. Hulu, LLC*, 722 F.3d 1335 (Fed. Cir. 2013), *vacated sub nom. WildTangent, Inc. v. Ultramercial, LLC*, 573 U.S. ___, 134 S. Ct. 2870 (2014). The saga continued as WildTangent filed a petition for certiorari from our 2013 decision, again requesting review by the Supreme Court.

While WildTangent’s petition was pending, the Supreme Court issued its decision in *Alice Corp. v. CLS Bank International*, 573 U.S. ___, 134 S. Ct. 2347 (2014). In that case, the Court affirmed our judgment that method and system claims directed to a computer-implemented scheme for mitigating settlement risk by using a third party intermediary were not patent-eligible under § 101 because the claims “add nothing of substance to the underlying abstract idea.” *See Alice*, 134 S. Ct. at 2359–60. The Court in *Alice* made clear that a claim that is directed to an abstract idea does not move into § 101 eligibility territory by “merely requir[ing] generic computer implementation.” *Id.* at 2357.

Subsequently, the Court granted WildTangent’s petition for a writ of certiorari, vacated our decision, and remanded the case for further consideration in light of *Alice*. *See WildTangent*, 134 S. Ct. 2870. We invited and received briefing by the parties. We also received four amicus briefs, all in support of the appellee, WildTangent.

DISCUSSION

As indicated, this case is back to this court on Ultramercial’s original appeal from the district court’s dismissal, but in its present posture we have the added benefit of the Supreme Court’s reasoning in *Alice*. We review a district court’s dismissal for failure to state a claim under the law of the regional circuit in which the district court sits, here the Ninth Circuit. *Juniper Networks, Inc. v. Shipley*, 643 F.3d 1346, 1350 (Fed. Cir. 2011) (citation omitted). The Ninth Circuit reviews *de novo* challenges to a dismissal for failure to state a claim under Fed. R. Civ. P. 12(b)(6). *Livid Holdings Ltd. v. Salomon Smith Barney, Inc.*, 416 F.3d 940, 946 (9th Cir. 2005). We review questions concerning patent-eligible subject matter under 35 U.S.C. § 101 without deference. *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 867 (Fed. Cir. 2010).

A § 101 analysis begins by identifying whether an invention fits within one of the four statutorily provided categories of patent-eligible subject matter: processes, machines, manufactures, and compositions of matter. 35 U.S.C. § 101. Section 101 “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice*, 134 S. Ct. at 2354 (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. ___, 133 S. Ct. 2107, 2116 (2013)). In *Alice*, the Supreme Court identified 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.” *Id.* at 2355 (citing *Mayo*, 132 S. Ct. at 1296–97). “First, we determine whether the claims at issue are directed to one of those patent-ineligible

concepts.” *Id.* If not, the claims pass muster under § 101. Then, in the second step, if we determine that the claims at issue are directed to one of those patent-ineligible concepts, we must determine whether the claims contain “an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (quoting *Mayo*, 132 S. Ct. at 1294) (alteration in original).

Ultramercial argues that the ’545 claims are not directed to the type of abstract idea at issue in *Alice*—one that was “routine,” “long prevalent,” or “conventional”—and are, instead, directed to a specific method of advertising and content distribution that was previously unknown and never employed on the Internet before. In other words, Ultramercial argues that the Supreme Court directs us to use a type of 103 analysis when assessing patentability so as to avoid letting § 101 “swallow all of patent law.” *Alice*, 134 S. Ct. at 2354. According to Ultramercial, abstract ideas remain patent-eligible under § 101 as long as they are new ideas, not previously well known, and not routine activity. Ultramercial contends, moreover, that, even if the claims are directed to an abstract idea, the claims remain patent-eligible because they extend beyond generic computer implementation of that abstract idea. Ultramercial argues that the claims require users to select advertisements, which was a change from existing methods of passive advertising and involves more than merely implementing an abstract idea.

WildTangent responds that the ’545 claims are directed to the abstract idea of offering free media in exchange for watching advertisements and that the

mere implementation of that idea on a computer does not change that fact. WildTangent contends that because the claims do no more than break the abstract idea into basic steps and add token extra-solution activity, the claims add no meaningful limitations to convert the abstract idea into patent-eligible subject matter.

We agree with WildTangent that the claims of the '545 patent are not directed to patent-eligible subject matter. Following the framework set out in *Alice*, we first “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* at 2355 (citing *Mayo*, 132 S. Ct. at 1296–97). The district court found that the abstract idea at the heart of the '545 patent was “that one can use [an] advertisement as an exchange or currency.” *Ultramercial*, 2010 WL 3360098, at *6. We agree.

We first examine the claims because claims are the definition of what a patent is intended to cover. An examination of the claim limitations of the '545 patent shows that claim 1 includes eleven steps for displaying an advertisement in exchange for access to copyrighted media. Without purporting to construe the claims, as the district court did not, the steps include: (1) receiving copyrighted media from a content provider; (2) selecting an ad after consulting an activity log to determine whether the ad has been played less than a certain number of times; (3) offering the media for sale on the Internet; (4) restricting public access to the media; (5) offering the media to the consumer in exchange for watching the selected ad; (6) receiving a request to view the ad from the consumer; (7) facilitating display of the ad; (8) allowing the

consumer access to the media; (9) allowing the consumer access to the media if the ad is interactive; (10) updating the activity log; and (11) receiving payment from the sponsor of the ad. '545 patent col. 8 ll. 5–48.

This ordered combination of steps recites an abstraction—an idea, having no particular concrete or tangible form. The process of receiving copyrighted media, selecting an ad, offering the media in exchange for watching the selected ad, displaying the ad, allowing the consumer access to the media, and receiving payment from the sponsor of the ad all describe an abstract idea, devoid of a concrete or tangible application. Although certain additional limitations, such as consulting an activity log, add a degree of particularity, the concept embodied by the majority of the limitations describes only the abstract idea of showing an advertisement before delivering free content.

As the Court stated in *Alice*, “[a]t some level, ‘all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’” *Alice*, 134 S. Ct. at 2354 (quoting *Mayo*, 132 S. Ct. at 1293). We acknowledge this reality, and we do not purport to state that all claims in all software-based patents will necessarily be directed to an abstract idea. Future cases may turn out differently. But here, the '545 claims are indeed directed to an abstract idea, which is, as the district court found, a method of using advertising as an exchange or currency. We do not agree with Ultramercial that the addition of merely novel or non-routine components to the claimed idea necessarily turns an abstraction into something

concrete. In any event, any novelty in implementation of the idea is a factor to be considered only in the second step of the *Alice* analysis.

The second step in the analysis requires us to determine whether the claims do significantly more than simply describe that abstract method. *Mayo*, 132 S. Ct. at 1297. We must examine the limitations of the claims to determine whether the claims contain an “inventive concept” to “transform” the claimed abstract idea into patent-eligible subject matter. *Alice*, 134 S. Ct. at 2357 (quoting *Mayo*, 132 S. Ct. at 1294, 1298). The transformation of an abstract idea into patent-eligible subject matter “requires ‘more than simply stat[ing] the [abstract idea] while adding the words ‘apply it.’” *Id.* (quoting *Mayo*, 132 S. Ct. at 1294) (alterations in original). “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*, 132 S. Ct. at 1297) (alterations in original). Those “additional features” must be more than “well-understood, routine, conventional activity.” *Mayo*, 132 S. Ct. at 1298.

We conclude that the limitations of the ’545 claims do not transform the abstract idea that they recite into patent-eligible subject matter because the claims simply instruct the practitioner to implement the abstract idea with routine, conventional activity. None of these eleven individual steps, viewed “both individually and ‘as an ordered combination,’” transform the nature of the claim into patent-eligible subject matter. *See Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1297, 1298). The majority of those

steps comprise the abstract concept of offering media content in exchange for viewing an advertisement. Adding 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 does not transform an otherwise abstract idea into patent-eligible subject matter. Instead, the claimed sequence of steps comprises only “conventional steps, specified at a high level of generality,” which is insufficient to supply an “inventive concept.” *Id.* at 2357 (quoting *Mayo*, 132 S. Ct. at 1294, 1297, 1300). Indeed, the steps of consulting and updating an activity log represent insignificant “data-gathering steps,” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011), and thus add nothing of practical significance to the underlying abstract idea. Further, that the system is active, rather than passive, and restricts public access also represents only insignificant “[pre]-solution activity,” which is also not sufficient to transform an otherwise patent-ineligible abstract idea into patent-eligible subject matter. *Mayo*, 132 S. Ct. at 1298 (alteration in original).

The claims’ invocation of the Internet also adds no inventive concept. As we have held, the use of the Internet is not sufficient to save otherwise abstract claims from ineligibility under § 101. *See CyberSource*, 654 F.3d at 1370 (reasoning that the use of the Internet to verify credit card transaction does not meaningfully add to the abstract idea of verifying the transaction). Narrowing the abstract idea of using advertising as a currency to the Internet is an “attempt[] to limit the use” of the abstract idea “to a particular technological environment,” which is insufficient to save a claim. *Alice*, 134 S. Ct. at 2358 (citing *Bilski v. Kappos*, 561

U.S. 593, 610–11, 130 S. Ct. 3218, 3230 (2010)). Given the prevalence of the Internet, implementation of an abstract idea on the Internet in this case is not sufficient to provide any “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.” *Mayo*, 132 S. Ct. at 1297. In sum, each of those eleven steps merely instructs the practitioner to implement the abstract idea with “routine, conventional activit[ies],” which is insufficient to transform the patent-ineligible abstract idea into patent-eligible subject matter. *Id.* at 1298. That some of the eleven steps were not previously employed in this art is not enough—standing alone—to confer patent eligibility upon the claims at issue.

While the Supreme Court has held that the machine-or-transformation test is not the sole test governing § 101 analyses, *Bilski*, 561 U.S. at 604, that test can provide a “useful clue” in the second step of the *Alice* framework, see *Bancorp Servs., L.L.C., v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (holding that the machine-or-transformation test remains an important clue in determining whether some inventions are processes under § 101), *cert denied*, 573 U.S. ___, 134 S. Ct. 2870 (2014). A claimed process can be patent-eligible under § 101 if: “(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008) (en banc), *aff’d on other grounds*, *Bilski*, 561 U.S. 593.

The claims of the ’545 patent, however, are not tied to any particular novel machine or apparatus, only a general purpose computer. As we have previously held, the Internet is not sufficient to save the patent under

the machine prong of the machine-or-transformation test. *CyberSource*, 654 F.3d at 1370. It is a ubiquitous information-transmitting medium, not a novel machine. And adding a computer to otherwise conventional steps does not make an invention patent-eligible. *Alice*, 134 S. Ct. at 2357. Any transformation from the use of computers or the transfer of content between computers is merely what computers do and does not change the analysis.

Although the preamble of claim 1 also requires a facilitator, '545 patent col 8, l. 6, the specification makes clear that the facilitator can be a person and not a machine, *id.* col. 3, ll. 47–50. Thus, nowhere does the '545 patent tie the claims to a novel machine.

The claims of the '545 patent also fail to satisfy the transformation prong of the machine-or-transformation test. The method as claimed refers to a transaction involving the grant of permission and viewing of an advertisement by the consumer, the grant of access by the content provider, and the exchange of money between the sponsor and the content provider. These manipulations of “public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances, and they are not representative of physical objects or substances.” *Bilski*, 545 F.3d at 963. We therefore hold that the claims of the '545 patent do not transform any article to a different state or thing. While this test is not conclusive, it is a further reason why claim 1 of the '545 patent does not contain anything more than conventional steps relating to using advertising as a currency.

CONCLUSION

Because the '545 patent claims are directed to no more than a patent-ineligible abstract idea, we conclude that the district court did not err in holding that the '545 patent does not claim patent-eligible subject matter.

Accordingly, the decision of the district court granting WildTangent's motion to dismiss is affirmed.

AFFIRMED

MAYER, *Circuit Judge*, concurring.

I agree that the claims asserted by Ultramercial, Inc. and Ultramercial, LLC (together, "Ultramercial") are ineligible for a patent, but write separately to emphasize three points. First, whether claims meet the demands of 35 U.S.C. § 101 is a threshold question, one that must be addressed at the outset of litigation. Second, no presumption of eligibility attends the section 101 inquiry. Third, *Alice Corporation v. CLS Bank International*, 134 S. Ct. 2347, 2356–59 (2014), for all intents and purposes, set out a technological arts test for patent eligibility. Because the purported inventive concept in Ultramercial's asserted claims is an entrepreneurial rather than a technological one, they fall outside section 101.

I.

The Constitution's Intellectual Property Clause is at once a grant of power and a restriction on that power. *Graham v. John Deere Co.*, 383 U.S. 1, 5 (1966); see also *In re Yuan*, 188 F.2d 377, 380 (CCPA 1951)

(explaining that the constitutional grant of authority to issue patents “is the only one of the several powers conferred upon the Congress which is accompanied by a specific statement of the reason for it”). Unless we are to assume that the constraints explicit in the Intellectual Property Clause are mere surplusage, we are bound to ensure that the patent monopoly serves “[t]o promote the Progress of Science and useful Arts,” U.S. Const. art. I, § 8, cl. 8. “This is the standard expressed in the Constitution and it may not be ignored.” *Graham*, 383 U.S. at 6.

Section 101 is the gateway to the Patent Act for good reason. It is the sentinel, charged with the duty of ensuring that our nation’s patent laws encourage, rather than impede, scientific progress and technological innovation. *See Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1301 (2012) (emphasizing that patent protection may not “foreclose[] more future invention than the underlying discovery could reasonably justify”); *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 511 (1917) (explaining that “the primary purpose” of the patent system is to promote scientific progress, not to “creat[e] . . . private fortunes for the owners of patents”). The Supreme Court has thus dictated that section 101 imposes “a threshold test,” *Bilski v. Kappos*, 561 U.S. 593, 602 (2010), one that must be satisfied before a court can proceed to consider subordinate validity issues such as non-obviousness under 35 U.S.C. § 103 or adequate written description under 35 U.S.C. § 112. *See Parker v. Flook*, 437 U.S. 584, 593 (1978) (“*Flook*”) (“The obligation to determine what type of discovery is sought to be patented” so as to determine whether it falls within the ambit of

section 101 “must precede the determination of whether that discovery is, in fact, new or obvious.”). This court has likewise correctly recognized that subject matter eligibility is the primal inquiry, one that must be addressed at the outset of litigation. *See In re Comiskey*, 554 F.3d 967, 973 (Fed. Cir. 2009) (“Only if the requirements of § 101 are satisfied is the inventor allowed to pass through to the other requirements for patentability, such as novelty under § 102 and . . . non-obviousness under § 103.” (citations and internal quotation marks omitted)); *State St. Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1372 n.2 (Fed. Cir. 1998) (Section 101 is “[t]he first door which must be opened on the difficult path to patentability.” (citations and internal quotation marks omitted)).

In this sense, the section 101 determination bears some of the hallmarks of a jurisdictional inquiry. Just as a court must assure itself of its own jurisdiction before resolving the merits of a dispute, *see Diggs v. Dep’t of Hous. & Urban Dev.*, 670 F.3d 1353, 1355 (Fed. Cir. 2011), it must likewise first assess whether claimed subject matter is even *eligible* for patent protection before addressing questions of invalidity or infringement. If a patent is not directed to “the kind of discover[y]” that the patent laws were intended to protect, *Flook*, 437 U.S. at 593 (1978) (internal quotation marks omitted), there is no predicate for any inquiry as to whether particular claims are invalid or infringed. Indeed, if claimed subject matter does not fall within the ambit of section 101, any determination on validity or infringement constitutes an impermissible advisory opinion. *See Oil, Chem. & Atomic Workers Int’l Union v. Missouri*, 361 U.S. 363, 367 (1960) (emphasizing that federal courts are to

decide only “actual controversies by a judgment which can be carried into effect, and not to give opinions upon moot questions or abstract propositions” (citations and internal quotation marks omitted)).

From a practical perspective, addressing section 101 at the outset of litigation will have a number of salutary effects. First, it will conserve scarce judicial resources. Failure to recite statutory subject matter is the sort of “basic deficiency,” that can, and should, “be exposed at the point of minimum expenditure of time and money by the parties and the court,” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 558 (2007) (citations and internal quotation marks omitted). Here, for example, the district court properly invoked section 101 to dismiss Ultramercial’s infringement suit on the pleadings. No formal claim construction was required because the asserted claims disclosed no more than “an abstract idea garnished with accessories” and there was no “reasonable construction that would bring [them] within patentable subject matter.” *Ultramercial, LLC v. Hulu, LLC*, No. 09-CV-6918, 2010 WL 3360098, at *6 (C.D. Cal. Aug. 13, 2010).

Second, resolving subject matter eligibility at the outset provides a bulwark against vexatious infringement suits. The scourge of meritless infringement claims has continued unabated for decades due, in no small measure, to the ease of asserting such claims and the enormous sums required to defend against them. Those who own vague and overbroad business method patents will often file “nearly identical patent infringement complaints against a plethora of diverse defendants,” and then “demand . . . a quick settlement at a price far lower

than the cost to defend the litigation.” *Eon-Net LP v. Flagstar Bancorp*, 653 F.3d 1314, 1326 (Fed. Cir. 2011). In many such cases, the patentee will “place[] little at risk when filing suit,” whereas the accused infringer will be forced to spend huge sums to comply with broad discovery requests. *Id.* at 1327 (noting that accused infringers are often required “to produce millions of pages of documents, collected from central repositories and numerous document custodians”). Given the staggering costs associated with discovery, “*Markman*” hearings, and trial, it is hardly surprising that accused infringers feel compelled to settle early in the process. *See id.* (noting that the accused infringer had “expended over \$600,000 in attorney fees and costs to litigate [the] case through claim construction”); *see also Cardinal Chem. Co. v. Morton Int’l, Inc.*, 508 U.S. 83, 101 n.24 (1993), (explaining that “prospective defendants will often decide that paying royalties under a license or other settlement is preferable to the costly burden of challenging [a] patent” (citations and internal quotation marks omitted)). Addressing section 101 at the threshold will thwart attempts—some of which bear the “indicia of extortion,” *Eon-Net*, 653 F.3d at 1326—to extract “nuisance value” settlements from accused infringers. *Id.* at 1327; *see also id.* at 1328 (explaining that the asserted patents “protected only settlement receipts, not . . . products”).

Finally, and most importantly, turning to section 101 at the outset protects the public. *See Cardinal Chem.*, 508 U.S. at 101 (emphasizing the public interest in preventing the “grant [of] monopoly privileges to the holders of invalid patents” (footnote omitted)). Subject matter eligibility challenges provide the most efficient and effective tool for clearing the

patent thicket, weeding out those patents that stifle innovation and transgress the public domain. As a general matter, trial courts have broad discretion in controlling their dockets and in determining the order in which issues are to be adjudicated. But the public interest in eliminating defective patents is an “even more important countervailing concern[],” *Cardinal Chem.*, 508 U.S. at 99, which counsels strongly in favor of resolving subject matter eligibility at the threshold of litigation. Indeed, it was this impulse which impelled the Supreme Court to insist that this court address invalidity claims, notwithstanding a finding of no infringement. *Id.* at 99–101. The need for early resolution of eligibility is even more compelling. See *Pope Mfg. Co. v. Gormully*, 144 U.S. 224, 234 (1892) (“It is as important to the public that competition should not be repressed by worthless patents, as that the patentee of a really valuable invention should be protected in his monopoly.”).

II.

The Supreme Court has taken up four subject matter eligibility challenges in as many years, endeavoring to right the ship and return the nation’s patent system to its constitutional moorings. See *Alice*, 134 S. Ct. at 2357 (concluding that “generic computer implementation” did not bring claims within section 101); *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2117–18 (2013) (“*Myriad*”) (concluding that claims covering naturally-occurring DNA segments were patent ineligible); *Mayo*, 132 S. Ct. at 1302 (concluding that claims describing a natural law but “add[ing] nothing of significance” to that law fell outside section 101); *Bilski*, 561 U.S. at 611

(concluding that a method for hedging against economic risk was a patent ineligible abstract idea). Rejecting efforts to treat section 101 as a “dead letter,” *Mayo*, 132 S. Ct. at 1303, the Court has unequivocally repudiated the overly expansive approach to patent eligibility that followed in the wake of *State Street*, 149 F.3d at 1373. *See Bilski*, 561 U.S. at 659 (Breyer, J., concurring in the judgment) (explaining that *State Street* “preceded the granting of patents that ranged from the somewhat ridiculous to the truly absurd” (citations and internal quotation marks omitted)).

The rationale for the presumption of validity is that the United States Patent and Trademark Office (“PTO”), “in its expertise, has approved the claim.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 426 (2007). That rationale, however, is “much diminished” in situations in which the PTO has not properly considered an issue. *Id.* Because the PTO has for many years applied an insufficiently rigorous subject matter eligibility standard, no presumption of eligibility should attach when assessing whether claims meet the demands of section 101.

Indeed, applying a presumption of eligibility is particularly unwarranted given that the expansionist approach to section 101 is predicated upon a misapprehension of the legislative history of the 1952 Patent Act. Those who support a “coarse filter” approach to section 101 often argue that the Act’s legislative history demonstrates that Congress intended statutory subject matter to “include anything under the sun that is made by man.” *See, e.g., AT&T Corp. v. Excel Commc’ns, Inc.*, 172 F.3d 1352, 1355 (Fed. Cir. 1999). Read in context, however, the

legislative history says no such thing. *See Mayo*, 132 S. Ct. at 1303–04. The full statement from the committee report reads: “A person may have ‘invented’ a machine or a manufacture, which may include anything under the sun that is made by man, *but it is not necessarily patentable under section 101 unless the conditions of the title are fulfilled.*” H.R. Rep. No. 1923, 82d Cong., 2d Sess., at 6 (1952) (emphasis added). Thus, far from supporting an expansive approach to section 101, the relevant legislative history makes clear that while a person may have “invented” something under the sun, it does not qualify for patent protection unless the Patent Act’s statutory requirements have been satisfied.

Although the Supreme Court has taken up several section 101 cases in recent years, it has never mentioned—much less applied—any presumption of eligibility. The reasonable inference, therefore, is that while a presumption of validity attaches in many contexts, *see Microsoft Corp. v. i4i Ltd. P’ship*, 131 S. Ct. 2238, 2243–47 (2011), no equivalent presumption of eligibility applies in the section 101 calculus.

III.

Alice recognized that the patent system does not extend to all products of human ingenuity. 134 S. Ct. at 2358–60; *see also Myriad*, 133 S. Ct. at 2117 (“Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.”). Because the system’s objective is to encourage “the onward march of science,” *O’Reilly v. Morse*, 56 U.S. (15 How.) 62, 113 (1853), its rewards do not flow to ideas—even good ones—outside of the technological arena.

In *Alice*, the claimed intermediated settlement technique was purportedly new and useful, but the Supreme Court nonetheless unanimously concluded that it fell outside section 101.¹ 134 S. Ct. at 2358–59. The problem was not that the asserted claims disclosed no innovation, but that it was an entrepreneurial rather than a technological one. In effect, *Alice* articulated a technological arts test for patent eligibility, concluding that the asserted method and system claims were patent ineligible because they did not “improve the functioning of the computer itself” or “effect an improvement in any other technology or technical field.” *Id.* at 2359; *see also id.* at 2358 (explaining that the claims in *Diamond v. Diehr*, 450 U.S. 175, 177–79 (1981) (“*Diehr*”), were patentable because they disclosed an “improve[ment]” to a “technological process”). In assessing patent eligibility, advances in non-technological disciplines—such as business, law, or the social sciences—simply do not count.

In *Bilski*, the Supreme Court recognized that “business method patents raise special problems in terms of vagueness and suspect validity,” 561 U.S. at 608, but it declined to hold “that business methods are categorically outside of § 101’s scope,” *id.* at 607. Notably, however, it invited this court to fashion a rule

¹The Court noted that “the concept of intermediated settlement is a fundamental economic practice long prevalent in our system of commerce.” *Alice*, 134 S. Ct. at 2356 (citations and internal quotation marks omitted). But whether the “concept” of intermediated settlement is an abstract idea is a wholly different question from whether the claimed invention provided a useful and innovative application of that concept.

defining a “narrower category” of patent-ineligible claims directed to methods of conducting business. *See id.* at 608–09 (“[I]f the Court of Appeals were to succeed in defining a narrower category or class of patent applications that claim to instruct how business should be conducted, and then rule that the category is unpatentable because, for instance, it represents an attempt to patent abstract ideas, this conclusion might well be in accord with controlling precedent.”). A rule holding that claims are impermissibly abstract if they are directed to an entrepreneurial objective, such as methods for increasing revenue, minimizing economic risk, or structuring commercial transactions, rather than a technological one, would comport with the guidance provided in both *Alice* and *Bilski*.

To satisfy the technological arts test, claims must harness natural laws and scientific principles—those “truth[s] about the natural world that ha[ve] always existed,” *Alice*, 134 S. Ct. at 2356 (citations and internal quotation marks omitted)—and use them to solve seemingly intractable problems. They must, moreover, not only describe a technological objective, but set out a precise set of instructions for achieving it.²

² Some charge that if patent eligibility turns on the disclosure of technology that is both “new” and clearly delineated, section 101 will subsume the non-obviousness and adequate written description inquiries set out in subsequent sections of the Patent Act. The simple fact, however, is that this court’s approach to sections 103 and 112 has proved woefully inadequate in preventing a deluge of very poor quality patents. *See, e.g.,* Gerard N. Magliocca, *Patenting the Curve Ball: Business Methods & Industry Norms*, 2009 BYU L. Rev. 875, 900 (2009) (“[T]here is no evidence that relying on §§ 102, 103, or 112 will solve the problem [of poor quality business method and software patents]. This claim was

An idea is impermissibly “abstract” if it is inchoate—unbounded and still at a nascent stage of development. It can escape the realm of the abstract only through concrete application. *Mackay Radio & Tel. Co. v. Radio Corp.*, 306 U.S. 86, 94 (1939) (“While a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.”). This concrete application is new technology—taking a scientific principle or natural law and “tying it down” by implementing it in a precisely defined manner. *See Mayo*, 132 S. Ct. at 1302 (rejecting claims, in part, because they did “not confine their reach to particular applications”). The claims in *Diehr*, 450 U.S. at 187, for example, were deemed patent eligible because they provided a clearly delineated set of instructions for carrying out a new technique for curing rubber and their reach was confined to a particular industrial application.

Precise instructions for implementing an idea confine the reach of a patent, ensuring that the scope of the claims is commensurate with their technological disclosure. In assessing patent eligibility, “the underlying functional concern . . . is a *relative* one: how much future innovation is foreclosed relative to the contribution of the inventor.” *Mayo*, 132 S. Ct. at 1303;

made ten years ago. It is still being made now. At what point does this argument run out of credibility?” (footnote omitted)). Section 101’s vital role—a role that sections 103 and 112 “are not equipped” to take on, *Mayo*, 132 S. Ct. at 1304—is to cure systemic constitutional infirmities by eradicating those patents which stifle technological progress and unjustifiably impede the free flow of ideas and information.

see *Motion Picture Patents*, 243 U.S. at 513 (“[T]he inventor [is entitled to] the exclusive use of just what his inventive genius has discovered. It is all that the statute provides shall be given to him and it is all that he should receive, for it is the fair as well as the statutory measure of his reward for his contribution to the public stock of knowledge.”). At its core, the technological arts test prohibits claims which are “overly broad,” *Mayo*, 132 S. Ct. at 1301, in proportion to the technological dividends they yield.

IV.

Ultramercial’s asserted claims fall short of *Alice*’s technological arts test. Their purported inventive concept is that people will be willing to watch online advertisements in exchange for the opportunity to view copyrighted materials. See U.S. Patent No. 7,346,545 col.8 ll.5–48. Because the innovative aspect of the claimed invention is an entrepreneurial rather than a technological one, it is patent ineligible.

The fact that the asserted claims “require a substantial and meaningful role for the computer,” *Alice*, 134 S. Ct. at 2359 (citations and internal quotation marks omitted), is insufficient to satisfy the technological arts test. It is not that generic computers and the Internet are not “technology,” but instead that they have become indispensable staples of contemporary life. Because they are the basic tools of modern-day commercial and social interaction, their use should in general remain “free to all men and reserved exclusively to none,” *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948); see *Alice*, 134 S. Ct. at 2354 (“[M]onopolization of [the basic tools of scientific and technological work] through the grant

of a patent might tend to impede innovation more than it would tend to promote it, thereby thwarting the primary object of the patent laws.” (citations and internal quotation marks omitted); *Graham*, 383 U.S. at 6 (“Congress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available.”). Accordingly, claims like those asserted by Ultramercial, which “simply instruct the practitioner to implement [an] abstract idea . . . on a generic computer,” *Alice*, 134 S. Ct. at 2359, do not pass muster under section 101.

APPENDIX B

SUPREME COURT OF THE UNITED STATES

No. 13-255

[Filed June 30, 2014]

WildTangent, Inc.,
Petitioner)
v.)
Ultramercial, LLC, et al.)

JUDGES: Roberts, Scalia, Kennedy, Thomas,
Ginsburg, Breyer, Alito, Sotomayor, Kagan.

OPINION

On petition for writ of certiorari to the United States Court of Appeals for the Federal Circuit. Petition for writ of certiorari granted. Judgment vacated, and case remanded to the United States Court of Appeals for the Federal Circuit for further consideration in light of *Alice Corp. v. CLS Bank Int'l*, 573 U. S. ___, 134 S. Ct. 2347, 189 L. Ed. 2d 296 (2014).

BRESS, ABRIEL BELL and KATHERINE TWOMEY, of
Washington, DC.

Before RADER, *Chief Judge*, LOURIE, and O'MALLEY,
Circuit Judges.

Opinion for the court filed by *Chief Judge* RADER.

Concurring opinion filed by *Circuit Judge* LOURIE.

RADER, *Chief Judge*.

The United States District Court for the Central District of California dismissed this patent suit, filed by Ultramercial, LLC and Ultramercial, Inc. (collectively, "Ultramercial"), by holding that U.S. Patent No. 7,346,545 ("the '545 patent") does not claim patent-eligible subject matter. In an earlier decision, later vacated by the United States Supreme Court, this court reversed the district court's holding and remanded. *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1325 (Fed. Cir. 2011), vacated sub nom. *WildTangent, Inc. v. Ultramercial, LLC*, 132 S.Ct. 2431 (2012). Because this court again holds that the district court erred in holding that the subject matter of the '545 patent is not a "process" within the language and meaning of 35 U.S.C. § 101, this court again reverses and remands.

I.

The '545 patent claims a method for distributing copyrighted products (*e.g.*, songs, movies, books) over the Internet where the consumer receives a copyrighted product for free in exchange for viewing an advertisement, and the advertiser pays for the copyrighted content. Claim 1 of the '545 patent reads:

A method for distribution of products over the Internet via a facilitator, said method comprising the steps of:

a first step of receiving, from a content provider, media products that are covered by intellectual property rights protection and are available for purchase, wherein each said media product being comprised of at least one of text data, music data, and video data;

a second step of selecting a sponsor message to be associated with the media product, said sponsor message being selected from a plurality of sponsor messages, said second step including accessing an activity log to verify that the total number of times which the sponsor message has been previously presented is less than the number of transaction cycles contracted by the sponsor of the sponsor message;

a third step of providing the media product for sale at an Internet website;

a fourth step of restricting general public access to said media product;

a fifth step of offering to a consumer access to the media product without charge to the consumer on the precondition that the consumer views the sponsor message;

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a sixth step of receiving from the consumer a request to view the sponsor message, wherein the consumer submits said request in response to being offered access to the media product;

a seventh step of, in response to receiving the request from the consumer, facilitating the display of a sponsor message to the consumer;

an eighth step of, if the sponsor message is not an interactive message, allowing said consumer access to said media product after said step of facilitating the display of said sponsor message;

a ninth step of, 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;

a tenth step of recording the transaction event to the activity log, said tenth step including updating the total number of times the sponsor message has been presented; and

an eleventh step of receiving payment from the sponsor of the sponsor message displayed.

'545 patent col. 8, ll. 5-48.

Ultramercial sued Hulu, LLC (“Hulu”), YouTube, LLC (“YouTube”), and WildTangent, Inc. (“WildTangent”), alleging infringement of the ’545 patent. Hulu and YouTube have been dismissed from the case. WildTangent moved to dismiss for failure to state a claim, arguing that the ’545 patent did not claim patent-eligible subject matter. The district court granted WildTangent’s pre-answer motion to dismiss under Rule 12(b)(6). Ultramercial appeals. This court has jurisdiction under 28 U.S.C. § 1295(a)(1).

This court reviews a district court’s dismissal for failure to state a claim under the law of the regional circuit. *Juniper Networks, Inc. v. Shipley*, 643 F.3d 1346, 1350 (Fed. Cir. 2011) (citation omitted). The Ninth Circuit reviews de novo challenges to a dismissal for failure to state a claim under Fed. R. Civ. P. 12(b)(6). *Livid Holdings Ltd. v. Salomon Smith Barney, Inc.*, 403 F.3d 1050, 1055 (9th Cir. 2005). This court also reviews the ultimate determination regarding patent-eligible subject matter under 35 U.S.C. § 101 without deference. *In re Ferguson*, 558 F.3d 1359, 1363 (Fed. Cir. 2009).

II.

The district court dismissed Ultramercial’s claims for failure to claim statutory subject matter without formally construing the claims and, further, without requiring defendants to file answers. This raises several preliminary issues.

First, it will be rare that a patent infringement suit can be dismissed at the pleading stage for lack of patentable subject matter. This is so because every issued patent is presumed to have been issued

properly, absent clear and convincing evidence to the contrary. *See, e.g., CLS Bank Int'l v. Alice Corp.*, ___ F.3d ___, 2013 WL 1920941, *33 (Fed. Cir. May 10, 2013) (Chief Judge Rader, and Judges Linn, Moore, and O'Malley, concluding that "any attack on an issued patent based on a challenge to the eligibility of the subject matter must be proven by clear and convincing evidence," and Judges Lourie, Dyk, Prost, Reyna, and Wallach, concluding that a statutory presumption of validity applies when § 101 is raised as a basis for invalidity in district court proceedings.). Further, if Rule 12(b)(6) is used to assert an affirmative defense, dismissal is appropriate only if the well-pleaded factual allegations in the complaint, construed in the light most favorable to the plaintiff, suffice to establish the defense. *See Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 555 (2007); *Jones v. Bock*, 549 U.S. 199, 215 (2007). Thus, the *only* plausible reading of the patent must be that there is clear and convincing evidence of ineligibility. For those reasons, Rule 12(b)(6) dismissal for lack of eligible subject matter will be the exception, not the rule.

Second, as is shown more fully below, the analysis under § 101, while ultimately a legal determination, is rife with underlying factual issues. For example, while members of this court have used varying formulations for the precise test, there is no doubt the § 101 inquiry requires a search for limitations in the claims that narrow or tie the claims to specific applications of an otherwise abstract concept. *CLS Bank*, ___ F.3d at ___, 2013 WL 1920941 at *27-30 (meaningful limitations); *Id.* at *10 (opinion of Lourie, J.). Further, factual issues may underlie determining whether the patent embraces a scientific principle or abstract idea. *Id.*

(opinion of Lourie, J.) (“The underlying notion is that a scientific principle . . . reveals a relationship that has always existed.”) (quoting *Parker v. Flook*, 437 U.S. 584, 593 n.15 (1978)). If the question is whether “genuine human contribution” is required, and that requires “more than a trivial appendix to the underlying abstract idea,” and were not at the time of filing “routine, well-understood, or conventional,” factual inquiries likely abound. *Id.* at *11-12. Almost by definition, analyzing whether something was “conventional” or “routine” involves analyzing facts. *Id.* at *12. Likewise, any inquiry into the scope of preemption—how much of the field is “tied up” by the claim—by definition will involve historic facts: identifying the “field,” the available alternatives, and preemptive impact of the claims in that field. The presence of factual issues coupled with the requirement for clear and convincing evidence normally will render dismissal under Rule 12(b)(6) improper.

Third, and in part because of the factual issues involved, claim construction normally will be required. This court has never set forth a bright line rule requiring district courts to construe claims before determining subject matter eligibility. Indeed, because eligibility is a “coarse” gauge of the suitability of broad subject matter categories for patent protection, *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 869 (Fed. Cir. 2010), claim construction may not always be necessary for a § 101 analysis. *See, e.g., Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2010) (finding subject matter ineligible for patent protection without claim construction); *CLS Bank*, __ F.3d __, 2013 WL 1920941 (court decided eligibility of subject matter without formal claim construction).

On the other hand, if there are factual disputes, claim construction should be required. The procedural posture of the case may indicate whether claim construction is required. This case involves Rule 12(b)(6), which requires courts to accept the well-pleaded factual allegations as true and to require the accused infringer to establish that the only plausible reading of the claims is that, by clear and convincing evidence, they cover ineligible subject matter. It may also be feasible for the district court to choose to construe the claims in accordance with this court's precedent, or to adopt the construction proffered by the patentee. In either case, it cannot decide factual questions at this stage. At summary judgment, the district court may choose to construe the claims in accordance with this court's precedent, or if not it may choose to give a construction most favorable to the patentee, and to apply the usual rules pertaining to summary judgment from there, and still require clear and convincing evidence of ineligible subject matter.

Of course, even if not required, on many occasions a definition of the invention by claim construction can clarify the basic character of the subject matter of the invention. Thus, claim meaning may clarify the actual subject matter at stake in the invention and can enlighten, or even answer, questions about subject matter abstractness. In this procedural posture, however, the subject matter at stake and its eligibility does not require formal claim construction.

Finally, fourth, the question of eligible subject matter must be determined on a claim-by-claim basis. Construing every asserted claim and then conducting

a § 101 analysis may not be a wise use of judicial resources.

With these thoughts in mind, the court turns to the question of whether the court correctly dismissed the suit under § 101.

III.

A.

The statute controls the inquiry into patentable subject matter. 35 U.S.C. § 101 sets forth the categories of subject matter that are eligible for patent protection: “[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.” (Emphasis added). Underscoring its breadth, § 101 both uses expansive categories and modifies them with the word “any.” In *Bilski*, the Supreme Court emphasized that “[i]n choosing such expansive terms modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” 130 S. Ct. at 3225 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)).

The pertinent, expansive definition of “process” in § 100(b) confirms the statute’s intended breadth. At first examination, the Act’s definition of “process” to include a new use of a known machine seems superfluous. After all, if “any” process may be patented under § 101, § 100(b) seems wholly unnecessary. The amendment was necessary to avoid narrow judicial interpretations of “process” given to the pre-1952 statute. Specifically, the 1952 amendments added

§ 100(b) to ensure that doubts about the scope of a “process” under the pre-1952 version of the patent statute would not be read into the new Act. P.J. Federico, *Commentary on the New Patent Act*, reprinted in 75 J. Pat. & Trademark Off. Soc’y 161, 177 (1993) (“Remarks have appeared in a few decisions and elsewhere that new uses are not patentable [I]f such remarks are interpreted to mean that a new use or application of an old machine . . . cannot result in anything patentable then such statements are not and have never been an accurate statement of the law.”); Hearing Before Subcomm. No. 3 of the Comm. on the Judiciary, at 37 (1951) (Federico testifying that the “definition of ‘process’ has been added . . . to clarify the present law as to certain types of methods as to which some doubts have been expressed”); S. Rep. No. 82-1979, at 17 (1952) (Explaining that the definition clarified that “processes or methods which involve merely the new use of a known process . . . are processes or methods under the statute and may be patented provided the conditions of patentability are satisfied.”). Thus, changes were made to the 1952 Act to *broaden* eligible subject matter and *eliminate doubt* caused by narrow interpretations given to the prior statute. Moreover, not only did Congress expand the definition of “process” in 1952, Title 35 does not list a single ineligible category. At a time when Congress considered § 101, it broadened the statute and certainly did not place any specific limits on it.

The limited role of § 101 even in patentability (the patentee did not argue that § 101 is not a defense to infringement) is confirmed by other aspects of the Patent Act. As § 101 itself expresses, subject matter eligibility is merely a threshold check; patentability of

a claim ultimately depends on “the conditions and requirements of this title,” such as novelty, non-obviousness, and adequate disclosure. 35 U.S.C. § 101; see *Bilski*, 130 S. Ct. at 3225 (Characterizing § 101 as a “threshold test”); *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057, 1064 (Fed. Cir. 2011) (Pointing out the difference between “the threshold inquiry of patent-eligibility, and the substantive conditions of patentability”). By directing attention to the substantive criteria for patentability, Congress made it clear that the categories of patent-eligible subject matter are no more than a “coarse eligibility filter.” *Research Corp.*, 627 F.3d at 869. In other words, Congress made it clear that the expansive categories—process, machine, article of manufacture, and composition of matter—are not substitutes for the substantive patentability requirements set forth in §§ 102, 103, and 112 and invoked expressly by § 101 itself. After all, the purpose of the Patent Act is to encourage innovation, and the use of broadly inclusive categories of statutory subject matter ensures that “ingenuity . . . receive[s] a liberal encouragement.” *Chakrabarty*, 447 U.S. at 308. The plain language of the statute provides that any new, non-obvious, and fully disclosed technical advance is eligible for protection.

B.

The Supreme Court has on occasion recognized narrow judicial exceptions to the 1952 Act’s deliberately broadened eligibility provisions. In line with the broadly permissive nature of § 101’s subject matter eligibility principles and the structure of the Patent Act, case law has recognized only three narrow

categories of subject matter outside the eligibility bounds of § 101—laws of nature, physical phenomena, and abstract ideas. *Bilski*, 130 S. Ct. at 3225. The Court’s motivation for recognizing exceptions to this broad statutory grant was its desire to prevent the “monopolization” of the “basic tools of scientific and technological work,” which “might tend to impede innovation more than it would tend to promote it.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012) (“*Prometheus*”) (internal quotation marks omitted).

Though recognizing these exceptions, the Court has also recognized that these implied exceptions are in obvious tension with the plain language of the statute, its history, and its purpose. *See Chakrabarty*, 447 U.S. at 308 (“In choosing such expansive terms as ‘manufacture’ and ‘composition of matter,’ modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.”); *id.* at 315 (“Broad general language is not necessarily ambiguous when congressional objectives require broad terms.”). As the Supreme Court has made clear, too broad an interpretation of these exclusions from the grant in § 101 “could eviscerate patent law.” *Prometheus*, 132 S. Ct. at 1293; *cf. Bilski*, 130 S. Ct. at 3226 (“This Court has not indicated that the existence of these well-established exceptions gives the Judiciary *carte blanche* to impose other limitations that are inconsistent with the text and the statute’s purpose and design.”).

Thus, this court must not read § 101 so restrictively as to exclude “unanticipated inventions” because the most beneficial inventions are “often unforeseeable.”

See Chakrabarty, 447 U.S. at 316; *see also J.E.M. Ag Supply*, 534 U.S. at 135 (describing § 101 as “a dynamic provision designed to encompass new and unforeseen inventions.”). Broad inclusivity is the Congressional goal of § 101, not a flaw.

To sum up, because eligibility requires assessing judicially recognized exceptions against a broad and deliberately expanded statutory grant, one of the principles that must guide our inquiry is these exceptions should apply narrowly. Indeed, the Supreme Court has cautioned that, to avoid improper restraints on statutory language, acknowledged exceptions thereto must be rare.

C.

In the eligibility analysis as well, the presumption of proper issuance applies to a granted patent. As a practical matter, because judicially acknowledged exceptions could eviscerate the statute, application of this presumption and its attendant evidentiary burden is consistent with the Supreme Court’s admonition to cabin exceptions to § 101. Further, applying the presumption is consistent with patent office practice. Before issuing a patent, the Patent Office rejects claims if they are drawn to ineligible subject matter, just as it rejects claims if not compliant with §§ 102, 103, or 112. With one exception, the Supreme Court’s decisions since 1952 have addressed the propriety of those decisions. Thus, when a patent issues, it does so after the Patent Office assesses and endorses its eligibility under § 101, just as it assesses and endorses its patentability under the other provisions of Title 35. *See Microsoft Corp. v. i4i Ltd. P’ship*, 131 S. Ct. 2238, 2242, (2011) (“Congress has set forth the prerequisites for

issuance of a patent, which the PTO must evaluate in the examination process. To receive patent protection a claimed invention must, among other things, fall within one of the express categories of patentable subject matter, § 101, and be novel, § 102, and nonobvious, § 103.”).

In sum, the high level of proof applies to eligibility as it does to the separate patentability determinations. Accordingly, any attack on an issued patent based on a challenge to the eligibility of the subject matter must be proven by clear and convincing evidence. *Cf. Microsoft*, 31 S. Ct. at 2242 (“We consider whether § 282 requires an invalidity defense to be proved by clear and convincing evidence. We hold that it does.”).

IV.

A.

Defining “abstractness” has presented difficult problems, particularly for the § 101 “process” category. Clearly, a process need not use a computer, or some machine, in order to avoid “abstractness.” In this regard, the Supreme Court recently examined the statute and found that the ordinary, contemporary, common meaning of “method” may include even methods of doing business. *See Bilski*, 130 S. Ct. at 3228. Accordingly, the Court refused to deem business methods ineligible for patent protection and cautioned against “read[ing] into the patent laws limitations and conditions which the legislature has not expressed.” *Id.* at 3226 (quoting *Diamond v. Diehr*, 450 U.S. 175, 182 (1981)).

In an effort to grapple with this non-statutory “abstractness” exception to “processes,” the dictionary

provides some help. *See* Merriam-Webster's Collegiate Dictionary 5 (11th ed. 2003) (defining abstract as "disassociated from any specific instance . . . expressing a quality apart from an object <the word *poem* is concrete, *poetry* is [abstract]>"). An abstract idea is one that has no reference to material objects or specific examples—*i.e.*, it is not concrete. This court at one point set forth a machine-or-transformation test as the exclusive metric for determining the subject matter eligibility of processes. *In re Bilski*, 545 F.3d 943, 956 (Fed. Cir. 2008), *aff'd on other grounds*, *Bilski*, 130 S. Ct. 3218. The Supreme Court rejected this approach in *Bilski*, noting that the machine-or-transformation test is simply "a useful and important clue, an investigative tool, for determining whether *some* claimed inventions are processes under § 101" and is not "the sole test for deciding whether an invention is a patent-eligible 'process.'" 130 S. Ct. at 3227 (emphasis added). While machine-or-transformation logic served well as a tool to evaluate the subject matter of Industrial Age processes, that test has far less application to the inventions of the Information Age. *See id.* at 3227-28 ("[I]n deciding whether previously unforeseen inventions qualify as patentable 'processes,' it may not make sense to require courts to confine themselves to asking the questions posed by the machine-or-transformation test. § 101's terms suggest that new technologies may call for new inquiries."). Technology without anchors in physical structures and mechanical steps simply defy easy classification under the machine-or-transformation categories. As the Supreme Court suggests, mechanically applying that physical test "risk[s] obscuring the larger object of securing patents for valuable inventions without transgressing the public domain." *Id.* at 3227.

Members of both the Supreme Court and this court have recognized the difficulty of providing a precise formula or definition for the abstract concept of abstractness. *See id.* at 3236 (Stevens, J., concurring) (“The Court . . . [has] never provide[d] a satisfying account of what constitutes an unpatentable abstract idea.”); *Research Corp.*, 627 F.3d at 868. Because technology is ever-changing and evolves in unforeseeable ways, this court gives substantial weight to the statutory reluctance to list any new, non-obvious, and fully disclosed subject matter as beyond the reach of Title 35.

B.

A claim can embrace an abstract idea and be patentable. *See Prometheus*, 132 S. Ct. at 1294 (explaining that the fact that a claim uses a basic tool does not mean it is not eligible for patenting). Instead, a claim is not patent eligible only if, instead of claiming an *application* of an abstract idea, the claim is instead *to* the abstract idea itself. The inquiry here is to determine on which side of the line the claim falls: does the claim cover only an abstract idea, or instead does the claim cover an application of an abstract idea? *See Bilski*, 130 S. Ct. at 3230 (“[W]hile an abstract idea, law of nature, or mathematical formula could not be patented, an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” (emphasis in original) (internal quotation marks omitted)); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“He who discovers a hitherto unknown phenomenon of nature has no claim to a monopoly of it which the law recognizes. If there is to be invention from such a

discovery, it must come from the *application* of the law of nature to a new and useful end.” (emphasis added) (internal quotation marks omitted)); *Diehr*, 450 U.S. 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.”)

In determining on which side of the line the claim falls, the court must focus on the claim as a whole. As the Court explained:

In determining the eligibility of respondents’ claimed process for patent protection under § 101, their claims must be considered *as a whole*. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because a new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made.

Diehr, 450 U.S. at 188 (emphasis added). The majority in *Diehr* rejected the minority’s approach ignoring portions of the claims: “[i]n order for the dissent to reach its conclusion it is necessary for it to read out of respondents’ patent application all the steps in the claimed process which it determined were not novel or ‘inventive.’ That is not the purpose of the § 101 inquiry” *Id.* at 193 n.15 (citations omitted); *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 345 (1961) (“[T]here is no legally recognizable or protected ‘essential’ element, ‘gist’ or ‘heart’ of the invention.”).

The Court has long-recognized that any claim can be stripped down, simplified, generalized, or paraphrased to remove all of its concrete limitations, until at its core, something that could be characterized as an abstract idea is revealed. A court cannot go hunting for abstractions by ignoring the concrete, palpable, tangible limitations of the invention the patentee actually claims.

Instead, the relevant inquiry is whether a claim, as a whole, includes *meaningful* limitations restricting it to an application, rather than merely an abstract idea. *See Prometheus*, 132 S. Ct. at 1297 (“[D]o the patent claims add *enough* to their statements of the correlations to allow the processes they describe to qualify as patent-eligible processes that *apply* natural laws?”); *see also Fort Props., Inc. v. Am. Master Lease LLC*, 671 F.3d 1317, 1323 (Fed. Cir. 2012) (“[T]o impart patent-eligibility to an otherwise unpatentable process under the theory that the process is linked to a machine, the use of the machine must impose meaningful limits on the claim’s scope.” (internal quotation marks omitted)). For these reasons, a claim may be premised on an abstract idea and, indeed, the abstract idea may be of central importance to the invention—the question for patent eligibility is whether the claim contains limitations that meaningfully tie that abstract idea to an actual application of that idea through meaningful limitations.

This analysis is not easy, but potentially wrought with the risk of subjectivity and hindsight evaluations. It also, as noted at the outset, often entails factual inquiries inappropriate on a motion directed to the

pleadings. Fortunately, the Supreme Court has provided some guideposts.

An old example may be the most informative. The claims in *O'Reilly v. Morse*, 56 U.S. (15 How.) 62 (1854), and a case described therein, illustrate the distinction between a patent ineligible abstract idea and a practical application of an idea. The “difficulty” in *Morse* arose with the claim in which *Morse*:

d[id] not propose to limit [him]self to the specific machinery or parts of machinery described in the . . . specification and claims; the essence of [his] invention being the use of the motive power of the electric or galvanic current . . . however developed for marking or printing intelligible characters, signs, or letters, at any distances

Id. at 112 (internal quotation marks omitted). In considering *Morse*’s claim, the Supreme Court referred to an earlier English case that distinguished ineligible claims to a “principle” from claims “applying” that principle:

[I]t seems that the court at first doubted, whether it was a patent for anything more than the discovery that hot air would promote the ignition of fuel better than cold. And if this had been the construction, the court, it appears, would have held his patent to be void; because the discovery of a principle in natural philosophy or physical science, is not patentable.

But after much consideration, it was finally decided that this principle must be regarded as well known, and that the plaintiff had invented

a mechanical mode of applying it to furnaces; and that his invention consisted in interposing a heated receptacle, between the blower and the furnace, and by this means heating the air after it left the blower, and before it was thrown into the fire. Whoever, therefore, used this method of throwing hot air into the furnace, used the process he had invented, and thereby infringed his patent, although the form of the receptacle or the mechanical arrangements for heating it, might be different from those described by the patentee.

Id. at 116. The claim in *Morse* itself was impermissible because it covered “an effect produced by the use of electro-magnetism, distinct from the process or machinery necessary to produce it.” *The Telephone Cases*, 126 U.S. 1, 534 (1888) (quoting *Morse*, 56 U.S. (15 How.) at 120). This was in contrast to a sustained claim that was limited to:

making use of the motive power of magnetism, when developed by the action of such current or currents, substantially as set forth in the . . . description, . . . as means of operating or giving motion to machinery, which may be used to imprint signals upon paper or other suitable material, or to produce sounds in any desired manner, for the purpose of telegraphic communication at any distances.

Id. (first ellipsis added, second ellipsis in original) (quoting *Morse*, 56 U.S. (15 How.) at 85). “The effect of [*Morse*] was, therefore, that the use of magnetism as a motive power, without regard to the particular process with which it was connected in the patent, could not be

claimed, but that its use in that connection could.” *Benson*, 409 U.S. at 68 (quoting *The Telephone Cases*, 126 U.S. at 534).

The concern underscoring *Morse*, which has become clearer through the Supreme Court’s more recent precedents, is to deny patentability to an idea itself, rather than an application of that idea. The Court has provided some guidance on discerning when this should occur.

First, the Supreme Court has stated that a claim is not meaningfully limited if it merely describes an abstract idea or simply adds “apply it.” *See Prometheus*, 132 S. Ct. at 1294, 1297. The broad claim in *Morse* provides a striking example of this. We also know that, if a claim covers all practical applications of an abstract idea, it is not meaningfully limited. *See id.* at 1301-02. For example, “[a]llowing petitioners to patent risk hedging would pre-empt use of this approach in *all fields*, and would effectively grant a monopoly over an abstract idea.” *Bilski*, 130 S. Ct. at 3231 (emphasis added). While this concept is frequently referred to as “pre-emption,” it is important to remember that all patents “pre-empt” some future innovation in the sense that they preclude others from commercializing the invention without the patentee’s permission. Pre-emption is only a subject matter eligibility problem when a claim pre-empts all practical uses of an abstract idea. For example, the claims in *Benson* “purported to cover *any* use of the claimed method in a general-purpose digital computer of any type.” 409 U.S. at 64 (emphasis added). The claims were not allowed precisely because they pre-empted essentially all uses of the idea:

It is conceded that one may not patent an idea. But in practical effect that would be the result if the formula for converting [binary-coded decimal] numerals to pure binary numerals were patented in this case. The mathematical formula involved here has no substantial practical application except in connection with a digital computer, which means that . . . the patent would *wholly* pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.

Id. at 71-72 (emphasis added). When the steps of the claim “must be taken in order to apply the [abstract idea] in question,” the claim is essentially no different from saying apply the abstract idea. *Prometheus*, 132 S. Ct. at 1299-1300. It is not the breadth or narrowness of the abstract idea that is relevant, but whether the claim covers every practical application of that abstract idea.¹ As noted at the outset, whether a claim preempts “too much” will often require claim construction and factual inquiries.

And, the Supreme Court has stated that, even if a claim does not wholly pre-empt an abstract idea, it still

¹The pre-emption analysis must also recognize that the Patent Act does not halt or impede academic research, without commercial ends, to test, confirm, or improve a patented invention. *See Sawin v. Guild*, 21 F. Cas. 554, 555 (C.C.D. Mass. 1813) (No. 12,391) (Story, J.) (infringement does not occur when the invention is used “for the mere purpose of philosophical experiment, or to ascertain the verity and exactness of the specification”). Further, *Morse* shows that a claim is not “abstract” merely because it is broad, because the “hot air” claims were broad and covered many “mechanical arrangements” but yet found patent eligible.

will not be limited meaningfully if it contains only insignificant or token pre- or post-solution activity—such as identifying a relevant audience, a category of use, field of use, or technological environment. *See Prometheus*, 132 S. Ct. at 1297-98, 1300-01; *Bilski*, 130 S. Ct. at 3230-31; *Diehr*, 450 U.S. at 191-92 & n.14; *Parker v. Flook*, 437 U.S. 584, 595 n.18 (1978). Again, these may involve factual inquiries.

Finally, the Supreme Court has stated that a claim is not meaningfully limited if its purported limitations provide no real direction, cover all possible ways to achieve the provided result, or are overly-generalized. *See Prometheus*, 132 S. Ct. at 1300 (“[S]imply appending conventional steps, specified at a high level of generality, to laws of nature, natural phenomena, and abstract ideas cannot make those laws, phenomena, and ideas patentable.”); *Fort Props.*, 671 F.3d at 1323 (“Such a broad and general limitation does not impose meaningful limits on the claim’s scope.” (internal quotation marks omitted)). For example, in *Prometheus*, “the ‘determining’ step tells the doctor to determine the level of the relevant metabolites in the blood, through whatever process the doctor or the laboratory wishes to use.” 132 S. Ct. at 1297. *Diehr* explained that the application in *Flook* “did not purport to explain how these other variables were to be determined, nor did it purport to contain any disclosure relating to the chemical processes at work, the monitoring of process variables, or the means of setting off an alarm or adjusting an alarm system,” and that “[a]ll that it provides is a formula for computing an updated alarm limit.” *Diehr*, 450 U.S. at 186-87 (footnote omitted) (internal quotation marks omitted).

Just as the Supreme Court has indicated when a claim likely should not be deemed meaningfully limited, it has also given examples of meaningful limitations which likely remove claims from the scope of the Court's judicially created exceptions to § 101. Thus, a claim is meaningfully limited if it requires a particular machine implementing a process or a particular transformation of matter. *See Bilski*, 130 S. Ct. at 3227 (“This Court’s precedents establish that the machine-or-transformation test is a useful and important clue . . . for determining whether some claimed inventions are processes under § 101.”); *see also Prometheus*, 132 S. Ct. at 1302-03; *Diehr*, 450 U.S. at 184, 192. A claim also will be limited meaningfully when, in addition to the abstract idea, the claim recites added limitations which are essential to the invention. In those instances, the added limitations do more than recite pre- or post-solution activity, they are central to the solution itself. And, in such circumstances, the abstract idea is not wholly pre-empted; it is only pre-empted when practiced in conjunction with the other necessary elements of the claimed invention. *See Diehr*, 450 U.S. at 187 (“[T]he respondents here do not seek to patent a mathematical formula. Instead, they seek patent protection for a process of curing synthetic rubber. Their process admittedly employs a well-known mathematical equation, but they do not seek to pre-empt the use of that equation. Rather, they seek only to foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process.”); *see also Prometheus*, 132 S. Ct. at 1298-99 (discussing *Diehr*, 450 U.S. 175).

In specifying what the scope of the abstract idea exception to patent eligibility is, it is also important to

specify what the analysis is *not*. *Flook* suggested that an abstract idea is to be “treated as though it were a familiar part of the prior art.” 437 U.S. at 591-92. *Prometheus* used the language of “inventive concept” to describe the “other elements or a combination of elements . . . sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself” and explain that purported limitations must be more than “routine” or “conventional” to confer patent eligibility. 132 S. Ct. at 1294, 1298-99. While these inquiries do require an understanding of what existed in the ken of those skilled in the art during the relevant time frame, principles of patent eligibility must not be conflated with those of validity, however.

The Supreme Court repeatedly has cautioned against conflating the analysis of the conditions of patentability in the Patent Act with inquiries into patent eligibility. *See Diehr*, 450 U.S. at 190 (“The question therefore of whether a particular invention is novel is wholly apart from whether the invention falls into a category of statutory subject matter.” (internal quotation marks omitted)); *see also Prometheus*, 132 S. Ct. at 1304 (recognizing that “to shift the patent-eligibility inquiry entirely to [§§ 102, 103, and 112] risks creating significantly greater legal uncertainty, while assuming that those sections can do work that they are not equipped to do”). Because a new combination of old steps is patentable, as is a new process using an old machine or composition, subject matter eligibility must exist even if it was obvious to use the old steps with the new machine or composition. Otherwise the eligibility analysis ignores the text of

§§ 101 and 100(b), and reads § 103 out of the Patent Act.

In this regard, the Supreme Court's reference to "inventiveness" in *Prometheus* can be read as shorthand for its inquiry into whether implementing the abstract idea in the context of the claimed invention inherently requires the recited steps. Thus, in *Prometheus*, the Supreme Court recognized that the additional steps were those that *anyone* wanting to use the natural law would *necessarily* use. *See Prometheus*, 132 S. Ct. at 1298. If, to implement the abstract concept, one *must* perform the additional step, or the step is a routine and conventional aspect of the abstract idea, then the step merely separately restates an element of the abstract idea, and thus does not further limit the abstract concept to a practical application. *Id.* ("Anyone who wants to make use of these laws must first administer a thiopurine drug and measure the resulting metabolite concentrations, and so the combination amounts to nothing significantly more than an instruction to the doctor to apply the applicable laws when treating their patients.")

C.

There are also additional guideposts specific to computer-implemented inventions. When assessing computer implemented claims, while the mere reference to a general purpose computer will not save a method claim from being deemed too abstract to be patent eligible, the fact that a claim is limited by a tie to a computer is an important indication of patent eligibility. *See Bilski*, 130 S. Ct. at 3227. This tie to a machine moves it farther away from a claim to the abstract idea itself. Moreover, that same tie makes it

less likely that the claims will pre-empt all practical applications of the idea.

This inquiry focuses on whether the claims tie the otherwise abstract idea to a *specific way* of doing something with a computer, or a *specific computer* for doing something; if so, they likely will be patent eligible. On the other hand, claims directed to *nothing more than the idea* of doing that thing on a computer are likely to face larger problems. While no particular type of limitation is necessary, meaningful limitations may include the computer being part of the solution, being integral to the performance of the method, or containing an improvement in computer technology. *See SiRF Tech., Inc. v. Int'l Trade Comm'n*, 601 F.3d 1319, 1332-33 (Fed. Cir. 2010) (noting that “a machine,” a GPS receiver, was “integral to each of the claims at issue” and “place[d] a meaningful limit on the scope of the claims”). A special purpose computer, *i.e.*, a new machine, specially designed to implement a process may be sufficient. *See Alappat*, 33 F.3d at 1544 (“Although many, or arguably even all, of the means elements recited in claim 15 represent circuitry elements that perform mathematical calculations, which is essentially true of all digital electrical circuits, the claimed invention as a whole is directed to a combination of interrelated elements which combine to form a machine for converting discrete waveform data samples into anti-aliased pixel illumination intensity data to be displayed on a display means. This is not a disembodied mathematical concept which may be characterized as an ‘abstract idea,’ but rather a specific machine to produce a useful, concrete, and tangible result.” (footnotes omitted)); *see also id.* at 1545 (“We have held that such programming creates a new

machine, because a general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.”).

At bottom, with a claim tied to a computer in a specific way, such that the computer plays a meaningful role in the performance of the claimed invention, it is as a matter of fact not likely to pre-empt virtually all uses of an underlying abstract idea, leaving the invention patent eligible. “[I]nventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract that they override the statutory language and framework of the Patent Act.” *Research Corp.*, 627 F.3d at 869.

With this background, the court turns to the asserted claims here.

VI.

The district court did not construe the claims in accordance with this court’s precedent. Instead, it held that there was no “reasonable construction” that would “bring the patent within patentable subject matter.” A. 6. The district court erred in requiring the patentee to come forward with a construction that would show the claims *were* eligible. That is presumed. In this procedural posture, the district court should either have construed the claims in accordance with *Markman*, required the defendant to establish that the only plausible construction was one that, by clear and convincing evidence rendered the subject matter ineligible (with no factual inquiries), or adopted a construction most favorable to the patentee. For purposes of this appeal, this court adopts the latter

approach. It may be that formal claim construction will still be required to determine the merits of eligibility.

The district court held the asserted claim to be ineligible because it is “abstract.” In this procedural posture, the complaint and the patent must by themselves show clear and convincing evidence that the claim is not directed to an application of an abstract idea, but to a disembodied abstract idea itself. *See Diehr*, 450 U.S. at 187; *Parker*, 437 U.S. at 591; *Gottschalk*, 409 U.S. at 67. After all, unlike the Copyright Act which divides ideas from expression, the Patent Act covers and protects any new and useful technical advance, including applied ideas.

The claimed invention is a method for monetizing and distributing copyrighted products over the Internet. As a method, it easily satisfies § 100’s definition of “process” and thus falls within a § 101 category of patent-eligible subject matter. Thus, this court focuses on whether the claim is meaningfully limited to something less than an abstract idea that pre-empts use of an abstract concept.

The parties proceed on the assumption that the mere idea that advertising can be used as a form of currency is abstract, just as the vague, unapplied concept of hedging proved patent-ineligible in *Bilski*. However, the ’545 patent does not simply claim the age-old idea that advertising can serve as currency. Instead, for the following reasons, the court holds that

the district court erred in holding that the '545 patent does not claim a practical application of this concept.²

The '545 patent seeks to remedy problems with prior art banner advertising over the Internet, such as declining click-through rates, by introducing a method of product distribution that forces consumers to view and possibly even interact with advertisements before permitting access to the desired media product. '545 patent col. 2, ll.14-18. By its terms, the claimed invention purports to improve existing technology in the marketplace. By its terms, the claimed invention invokes computers and applications of computer technology.

Specifically, the '545 patent claims a particular internet and computer-based method for monetizing copyrighted products, consisting of the following steps: (1) receiving media products from a copyright holder, (2) selecting an advertisement to be associated with each media product, (3) providing said media products for sale on an Internet website, (4) restricting general public access to the media products, (5) offering free

² When assessing the abstract idea exception, the § 101 inquiry is a two-step one: first, whether the claim involves an intangible abstract idea; and if so, whether meaningful limitations in the claim make it clear that the claim is not to the abstract idea itself, but to a non-routine and specific application of that idea. Because the parties here focus only on the second step, we do as well. We note, however, that it is arguable that we are not even dealing with an intangible abstraction in the first instance; the claims relate to things that people do, not to mere mental steps. Because the district court did not enter judgment on that ground and the parties do not brief it, we decline to address this alternative ground upon which this matter might be resolved.

access to said media products on the condition that the consumer view the advertising, (6) receiving a request from a consumer to view the advertising, (7) facilitating the display of advertising and any required interaction with the advertising, (8) allowing the consumer access to the associated media product after such display and interaction, if any, (9) recording this transaction in an activity log, and (10) receiving payment from the advertiser. '545 patent col. 8, ll. 5-48. This court does not need the record of a formal claim construction to see that many of these steps require intricate and complex computer programming.

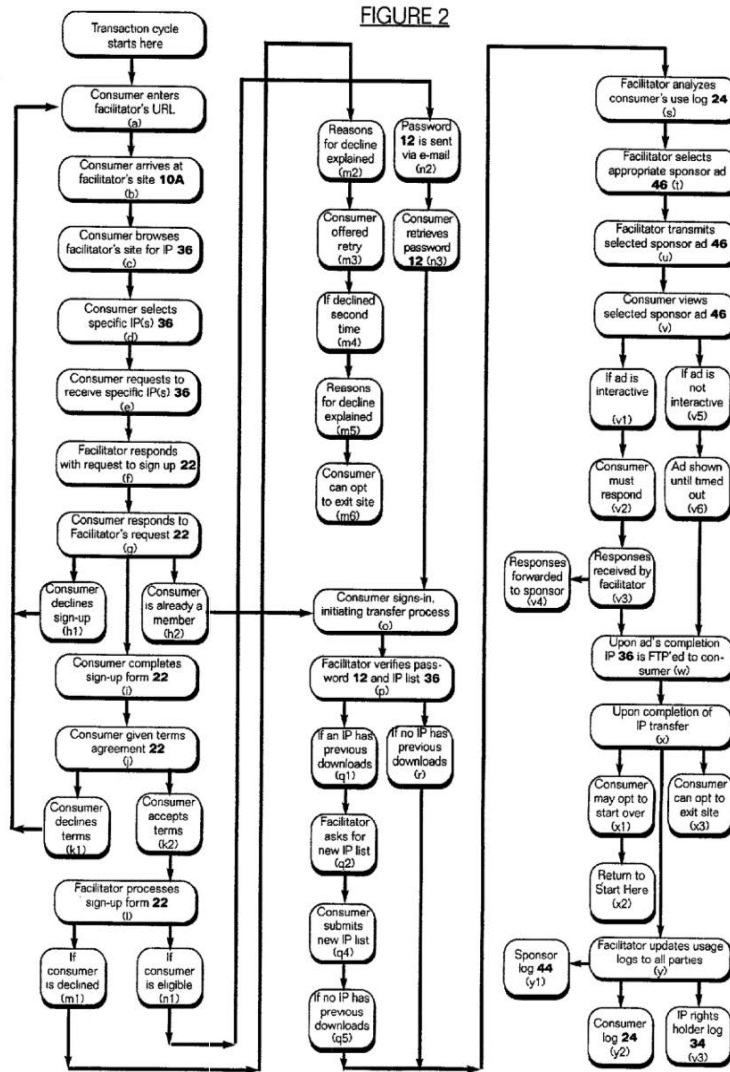
Even at this general level, it wrenches meaning from the word to label the claimed invention “abstract.” The claim does not cover the use of advertising as currency disassociated with any specific application of that activity. It was error for the district court to strip away these limitations and instead imagine some “core” of the invention. A. 6.

Further, and even without formal claim construction, it is clear that several steps plainly require that the method be performed through computers, on the internet, and in a cyber-market environment. One clear example is the third step, “providing said media products for sale on an Internet website.” *Id.* col. 8, ll. 20-21. And, of course, if the products are offered for sale on the Internet, they must be “restricted”—step four—by complex computer programming as well.

In addition, Figure 1, alone, demonstrates that the claim is not to some disembodied abstract idea but is instead a specific application of a method implemented

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Almost all of the steps in this process, as explained in the flow chart of Figure 2, are tied to computer implementation:



Viewing the subject matter as a whole, the invention involves an extensive computer interface. Unlike *Morse*, the claims are not made without regard to a particular process. Likewise, it does not say “sell advertising using a computer,” and so there is no risk of preempting all forms of advertising, let alone advertising on the Internet. Further, the record at this stage shows no evidence that the recited steps are all token pre- or post-solution steps. Finally, the claim appears far from over generalized, with eleven separate and specific steps with many limitations and sub-steps in each category. The district court improperly made a subjective evaluation that these limitations did not meaningfully limit the “abstract idea at the core” of the claims. A. 6.

Having said that, this court does not define the level of programming complexity required before a computer-implemented method can be patent-eligible. Nor does this court hold that use of an Internet website to practice such a method is either necessary or sufficient in every case to satisfy § 101. This court simply holds the claims in this case to be patent-eligible, in this posture, in part because of these factors.

In this context, this court examines as well the contention that the software programming necessary to facilitate the invention deserves no patent protection or amounts to abstract subject matter or, in the confusing terminology of machines and physical transformations, fails to satisfy the “particular machine” requirement. This court confronted that contention nearly two decades ago in *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994) (en banc). At that time, this court observed that

“programming creates a new machine, because a general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.” *Id.* at 1545. As computer scientists understand:

[T]he inventor can describe the invention in terms of a dedicated circuit or a process that emulates that circuit. Indeed, the line of demarcation between a dedicated circuit and a computer algorithm accomplishing the identical task is frequently blurred and is becoming increasingly so as the technology develops. In this field, a software process is often interchangeable with a hardware circuit.

Id. at 1583 (Rader, J., concurring). In other words, a programmed computer contains circuitry unique to that computer. That “new machine” could be claimed in terms of a complex array of hardware circuits, or more efficiently, in terms of the programming that facilitates a unique function. With the digital computer, considered by some the greatest invention of the twentieth century, as a vital invention, both this court and the Patent Office have long acknowledged that “improvements thereof” through interchangeable software or hardware enhancements deserve patent protection. Far from abstract, advances in computer technology—both hardware and software—drive innovation in every area of scientific and technical endeavor.

The court also notes that the claims in this case are not highly generalized. Instead, the ten specific steps in the claim limit any abstract concept within the scope of

the invention. Further, common sense alone establishes that these steps are not inherent in the idea of monetizing advertising. There are myriad ways to accomplish that abstract concept that do not infringe these claims.

This court understands that the broadly claimed method in the '545 patent does not specify a particular mechanism for delivering media content to the consumer (*i.e.*, FTP downloads, email, or real-time streaming). This breadth and lack of specificity does not render the claimed subject matter impermissibly abstract. Assuming the patent provides sufficient disclosure to enable a person of ordinary skill in the art to practice the invention and to satisfy the written description requirement, the disclosure need not detail the particular instrumentalities for each step in the process.

That a process may be patentable, irrespective of the particular form of the instrumentalities used, cannot be disputed. If one of the steps of a process be that a certain substance is to be reduced to a powder, it may not be at all material what instrument or machinery is used to effect that object, whether a hammer, a pestle and mortar, or a mill.

Benson, 409 U.S. at 69-70 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)). Moreover, written description and enablement are conditions for patentability that Title 35 sets “wholly apart from whether the invention falls into a category of statutory subject matter.” *Diehr*, 450 U.S. at 190 (quoting *In re Bergy*, 596 F.2d 952, 961 (C.C.P.A. 1979)). The “coarse eligibility filter” of § 101 is not the statutory tool to

address concerns about vagueness, indefinite disclosure, or lack of enablement, as these infirmities are expressly addressed by § 112. *See* 35 U.S.C. § 112; *see also Research Corp.*, 627 F.3d at 869 (“In § 112, the Patent Act provides powerful tools to weed out claims that may present a vague or indefinite disclosure of the invention.”).

Finally, the ’545 patent does not claim a mathematical algorithm, a series of purely mental steps, or any similarly abstract concept. It claims a particular method for collecting revenue from the distribution of media products over the Internet. In a recent case, this court discerned that an invention claimed an “unpatentable mental process.” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011). Unlike the claims in *CyberSource*, the claims here require, among other things, controlled interaction with a consumer over an Internet website, something far removed from *purely* mental steps.

In sum, as a practical application of the general concept of advertising as currency and an improvement to prior art technology, the claimed invention is not “so manifestly abstract as to override the statutory language of section 101.” *Research Corp.*, 627 F.3d at 869. Accordingly, this court reverses the district court’s dismissal of Ultramercial’s patent claims for lack of subject matter eligibility and remands for further proceedings. This decision does not opine at all on the patentability of the claimed invention under the substantive criteria set forth in §§ 102, 103, and 112.

REVERSED AND REMANDED

LOURIE, *Circuit Judge*, concurring.

I concur in the result reached by the majority, but I write separately because I believe that we should concisely and faithfully follow the Supreme Court's most recent guidance regarding patent eligibility in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289 (2012), and should track the plurality opinion of five judges from this court in *CLS Bank International v. Alice Corp.*, ___ F.3d ___, 2013 WL 1920941, at *1–20 (Fed. Cir. May 10, 2013) (Lourie, Dyk, Prost, Reyna, & Wallach, JJ., plurality opinion). It is our obligation to attempt to follow the Supreme Court's guidance in *Mayo* rather than to set forth our own independent views, however valid we may consider them to be. Indeed, this appeal was specifically vacated by the Supreme Court and remanded for further consideration in light of *Mayo*. *WildTangent, Inc. v. Ultramercial, LLC*, 132 S.Ct. 2431 (2012).

The claims at issue in this appeal are method claims, not machine claims, and both *Mayo* and *CLS Bank* dealt squarely with the issue of patent eligibility of method claims. The plurality opinion in *CLS Bank* identified a two-step process, derived from *Mayo*, for analyzing patent eligibility under § 101. First, a court must identify “whether the claimed invention fits within one of the four statutory classes set out in § 101.” *CLS Bank*, 2013 WL 1920941, at *9. Second, one must assess whether any of the judicial exceptions to subject-matter eligibility apply, including whether the claims are to patent-ineligible abstract ideas. *Id.*

In the case of abstractness, as discussed in *CLS Bank*, we must determine whether the claim poses “any

risk of preempting an abstract idea.” *Id.* To do so we must first “identify and define whatever fundamental concept appears wrapped up in the claim”; a claim construction may be helpful in this analysis. *Id.* Then, proceeding with the preemption analysis, the balance of the claim is evaluated to determine whether “additional substantive limitations . . . narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself.” *Id.* at *10 (citing *Mayo*, 132 S.Ct. at 1300; *Bilski v. Kappos*, 130 S.Ct. 3218, 3231 (2010); *Diamond v. Diehr*, 450 U.S. 175, 187 (1981)). Following this procedure, we are then ready to evaluate the claims at issue in this case.

I agree with the majority that no formal claim construction is needed to interpret the claims at this stage. *See Majority Op.* at 27. As the majority correctly notes, the ’545 patent “claims a particular method for collecting revenue from the distribution of media products over the Internet” and, as a process, “falls within a category of patent-eligible subject matter.” *Majority Op.* at 25–26. The abstract idea at the heart of the ’545 patent, which the district court properly identified, is “us[ing] advertising as an exchange or currency.” *Ultramercial, LLC v. Hulu, LLC*, No. CV 09-06918 RGK, 2010 WL 3360098, at *6 (C.D. Cal. Aug. 13, 2010). The ’545 patent claims, however, require more than just that abstract idea as part of the claimed method.

The additional claim limitations reciting how that idea is implemented “narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself.” *CLS Bank*, 2013 WL 1920941, at *10. While a computer or complex

computer program, as discussed by the majority opinion, may be necessary to perform the method, it is not what the claim specifically requires and thus should not be the focus of the analysis. Likewise, although the number of claim limitations is also not an indication of patent-eligibility, unlike the method claims in *CLS Bank*, in my view, the added limitations in these claims represent significantly more than the underlying abstract idea of using advertising as an exchange or currency and, as a consequence, do not preempt the use of that idea in all fields. *See CLS Bank*, 2013 WL 1920941, at *15. Thus, under the *CLS Bank* plurality analysis, I agree with the majority that the district court erred in dismissing Ultramercial's claims for lack of subject matter eligibility under § 101 due to abstractness.

APPENDIX D

SUPREME COURT OF THE UNITED STATES

No. 11-962

[Filed May 21, 2012]

WildTangent, Inc.,
Petitioner)
v.)
Ultramercial, LLC, et al.)

JUDGES: Roberts, Scalia, Kennedy, Thomas,
Ginsburg, Breyer, Alito, Sotomayor, Kagan.

OPINION

On petition for writ of certiorari to the United States Court of Appeals for the Federal Circuit. Petition for writ of certiorari granted. Judgment vacated, and case remanded to the United States Court of Appeals for the Federal Circuit for further consideration in light of *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. ___, 132 S. Ct. 1289, 182 L. Ed. 2d 321 (2012).

Before RADER, *Chief Judge*, LOURIE, and O'MALLEY,
Circuit Judges.

RADER, *Chief Judge*.

The United States District Court for the Central District of California dismissed Ultramercial, LLC and Ultramercial, Inc.'s (collectively, "Ultramercial") patent infringement claims, finding that U.S. Patent No. 7,346,545 ("the '545 patent") does not claim patent-eligible subject matter. Because the '545 patent claims a "process" within the language and meaning of 35 U.S.C. § 101, this court reverses and remands.

I

The '545 patent claims a method for distributing copyrighted products (e.g., songs, movies, books) over the Internet where the consumer receives a copyrighted product for free in exchange for viewing an advertisement, and the advertiser pays for the copyrighted content. Claim 1 of the '545 patent reads:

A method for distribution of products over the Internet via a facilitator, said method comprising the steps of:

- a first step of receiving, from a content provider, media products that are covered by intellectual property rights protection and are available for purchase, wherein each said media product being comprised of at least one of text data, music data, and video data;

- a second step of selecting a sponsor message to be associated with the media product, said sponsor message being selected from a plurality of sponsor messages, said second step including accessing an activity log to verify that the total number of times which the sponsor message has been previously presented is less than the number of transaction cycles contracted by the sponsor of the sponsor message;
- a third step of providing the media product for sale at an Internet website;
- a fourth step of restricting general public access to said media product;
- a fifth step of offering to a consumer access to the media product without charge to the consumer on the precondition that the consumer views the sponsor message;
- a sixth step of receiving from the consumer a request to view the sponsor message, wherein the consumer submits said request in response to being offered access to the media product;
- a seventh step of, in response to receiving the request from the consumer, facilitating the display of a sponsor message to the consumer;
- an eighth step of, if the sponsor message is not an interactive message, allowing said consumer access to said media product

after said step of facilitating the display of said sponsor message;

a ninth step of, 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;

a tenth step of recording the transaction event to the activity log, said tenth step including updating the total number of times the sponsor message has been presented; and

an eleventh step of receiving payment from the sponsor of the sponsor message displayed.

'545 patent col.8 ll.5-48.

Ultramercial filed suit against Hulu, LLC ("Hulu"), YouTube, LLC ("YouTube"), and WildTangent, Inc. ("WildTangent"), alleging infringement of the '545 patent. Hulu and YouTube have been dismissed from the case. WildTangent filed a motion to dismiss for failure to state a claim, arguing that the '545 patent did not claim patent-eligible subject matter. The district court granted WildTangent's motion to dismiss. Ultramercial appeals. This court has jurisdiction under 28 U.S.C. § 1295(a)(1).

This court reviews a district court's dismissal for failure to state a claim without deference. *Gillig v. Nike, Inc.*, 602 F.3d 1354, 1358 (Fed. Cir. 2010). This court also reviews determinations regarding patent-

eligible subject matter under 35 U.S.C. § 101 without deference. *In re Ferguson*, 558 F.3d 1359, 1363 (Fed. Cir. 2009).

II

The district court dismissed Ultramercial's claims for failure to claim statutory subject matter without formally construing the claims. This court has never set forth a bright line rule requiring district courts to construe claims before determining subject matter eligibility. Indeed, because eligibility is a "coarse" gauge of the suitability of broad subject matter categories for patent protection, *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 869 (Fed. Cir. 2010), claim construction may not always be necessary for a § 101 analysis. *See, e.g., Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2010) (finding subject matter ineligible for patent protection without claim construction). On many occasions, however, a definition of the invention via claim construction can clarify the basic character of the subject matter of the invention. Thus, claim meaning may clarify the actual subject matter at stake in the invention and can enlighten, or even answer, questions about subject matter abstractness. In this case, the subject matter at stake and its eligibility does not require claim construction.

III

35 U.S.C. § 101 sets forth the categories of subject matter that are eligible for patent protection: "[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” (emphasis added). In *Bilski*, the Supreme Court explained that “[i]n choosing such expansive terms modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” 130 S. Ct. at 3225 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)). After all, the purpose of the Patent Act is to encourage innovation, and the use of broadly inclusive categories of statutory subject matter ensures that “ingenuity . . . receive[s] a liberal encouragement.” *Chakrabarty*, 447 U.S. at 308.

More importantly, as § 101 itself expresses, subject matter eligibility is merely a threshold check; claim patentability ultimately depends on “the conditions and requirements of this title,” such as novelty, non-obviousness, and adequate disclosure. 35 U.S.C. § 101; see *Classen Immunotherapies, Inc. v. Biogen IDEC*, Nos. 2006-1634, 2006-1649, 2011 WL 3835409, at *6 (Fed. Cir. Aug. 31, 2011) (pointing out the difference between “the threshold inquiry of patent-eligibility, and the substantive conditions of patentability”). By directing attention to these substantive criteria for patentability, the language of § 101 makes clear that the categories of patent-eligible subject matter are no more than a “coarse eligibility filter.” *Research Corp.*, 627 F.3d at 869. In other words, the expansive categories—process, machine, article of manufacture, and composition of matter—are certainly not substitutes for the substantive patentability requirements set forth in § 102, § 103, and § 112 and invoked expressly by § 101 itself. Moreover, title 35 does not list a single ineligible category, suggesting that any new, non-obvious, and fully disclosed technical

advance is eligible for protection, subject to the following limited judicially created exceptions.

In line with the broadly permissive nature of § 101's subject matter eligibility principles, judicial case law has created only three categories of subject matter outside the eligibility bounds of § 101—laws of nature, physical phenomena, and abstract ideas. *Bilski*, 130 S. Ct. at 3225. Indeed, laws of nature and physical phenomena cannot be invented. Abstractness, however, has presented a different set of interpretive problems, particularly for the § 101 “process” category. Actually, the term “process” has a statutory definition that, again, admits of no express subject matter limitation: a title 35 “process” is a “process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.” 35 U.S.C. § 100(b). Indeed, the Supreme Court recently examined this definition and found that the ordinary, contemporary, common meaning of “method” may include even methods of doing business. *See Bilski*, 130 S. Ct. at 3228. Accordingly, the Court refused to deem business methods ineligible for patent protection and cautioned against “read[ing] into the patent laws limitations and conditions which the legislature has not expressed.” *Id.* at 3226 (quoting *Diamond v. Diehr*, 450 U.S. 175, 182 (1981)). And this court detects no limitations or conditions on subject matter eligibility expressed in statutory language. *See, e.g., Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, No. 2010-1406, 2011 WL 3211513, at *14 (Fed. Cir. July 29, 2011) (patent-ineligible categories of subject matter are “judicially created exceptions”); *Prometheus Labs., Inc. v. Mayo Collaborative Servs.*, 628 F.3d 1347, 1353 (Fed. Cir. 2010), *cert. granted*, 130

S.Ct. 3543 (2010) (patent-ineligible categories are “not compelled by the statutory text”); *see also Bilski*, 130 S. Ct. at 3225 (Supreme Court acknowledging that judge-created “exceptions are not required by the statutory text”).

In an effort to grapple with the non-statutory “abstractness” limit, this court at one point set forth a machine-or-transformation test as the exclusive metric for determining the subject matter eligibility of processes. *In re Bilski*, 545 F.3d 943, 956 (Fed. Cir. 2008), *aff’d on other grounds, Bilski*, 130 S.Ct. 3218. The Supreme Court rejected this approach in *Bilski*, noting that the machine-or-transformation test is simply “a useful and important clue, an investigative tool, for determining whether *some* claimed inventions are processes under § 101” and is not “the sole test for deciding whether an invention is a patent-eligible ‘process.’” 130 S. Ct. at 3227 (emphasis added). While machine-or-transformation logic served well as a tool to evaluate the subject matter of Industrial Age processes, that test has far less application to the inventions of the Information Age. *See id.* at 3227-28 (“[I]n deciding whether previously unforeseen inventions qualify as patentable ‘processes,’ it may not make sense to require courts to confine themselves to asking the questions posed by the machine-or-transformation test. Section 101’s terms suggest that new technologies may call for new inquiries.”). Technology without anchors in physical structures and mechanical steps simply defy easy classification under the machine-or-transformation categories. As the Supreme Court suggests, mechanically applying that physical test “risk[s] obscuring the larger object of securing patents

for valuable inventions without transgressing the public domain.” *Id.* at 3228.

Both members of the Supreme Court and this court have recognized the difficulty of providing a precise formula or definition for the judge-made ineligible category of abstractness. *See id.* at 3236 (Stevens, J., concurring) (“The Court . . . [has] never provide[d] a satisfying account of what constitutes an unpatentable abstract idea.”); *Research Corp.*, 627 F.3d at 868. Because technology is ever-changing and evolves in unforeseeable ways, this court gives substantial weight to the statutory reluctance to list any new, non-obvious, and fully disclosed subject matter as beyond the reach of title 35. In sum, § 101 is a “dynamic provision designed to encompass new and unforeseen inventions.” *J.E.M Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 534 U.S. 124, 135 (2001). With this in mind, this court does “not presume to define ‘abstract’ beyond the recognition that this disqualifying characteristic should exhibit itself so manifestly as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act.” *Research Corp.*, 627 F.3d at 868.

Although abstract principles are not eligible for patent protection, an application of an abstract idea may well be deserving of patent protection. *See Diehr*, 450 U.S. at 187 (“an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection”); *Parker v. Flook*, 437 U.S. 584, 591 (1978) (“While a scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure

created with the aid of knowledge of scientific truth may be.”). The application of an abstract idea to a “new and useful end” is the type of invention that the Supreme Court has described as deserving of patent protection. *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). After all, unlike the Copyright Act which divides idea from expression, the Patent Act covers and protects any new and useful technical advance, including applied ideas.

Turning to the ’545 patent, the claimed invention is a method for monetizing and distributing copyrighted products over the Internet. As a method, it satisfies § 100’s definition of “process” and thus falls within a § 101 category of patent-eligible subject matter. Thus, this court focuses its inquiry on the abstractness of the subject matter claimed by the ’545 patent.

“[I]nventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract that they override the statutory language and framework of the Patent Act.” *Research Corp.*, 627 F.3d at 869. The ’545 patent seeks to remedy problems with prior art banner advertising, such as declining click-through rates, by introducing a method of product distribution that forces consumers to view and possibly even interact with advertisements before permitting access to the desired media product. ’545 patent col.2 ll.14-18. By its terms, the claimed invention purports to improve existing technology in the marketplace. By its terms, the claimed invention invokes computers and applications of computer technology. Of course, the patentability of the ’545 patent, though acknowledged by the U.S. Patent Office, would still need to withstand challenges that the

claimed invention does not advance technology (novelty), does not advance technology sufficiently to warrant patent protection (obviousness), or does not sufficiently enable, describe, and disclose the limits of the invention (adequate disclosure).

Returning to the subject matter of the '545 patent, the mere idea that advertising can be used as a form of currency is abstract, just as the vague, unapplied concept of hedging proved patent-ineligible in *Bilski*. However, the '545 patent does not simply claim the age-old idea that advertising can serve as currency. Instead the '545 patent discloses a practical application of this idea. The '545 patent claims a particular method for monetizing copyrighted products, consisting of the following steps: (1) receiving media products from a copyright holder, (2) selecting an advertisement to be associated with each media product, (3) providing said media products for sale on an Internet website, (4) restricting general public access to the media products, (5) offering free access to said media products on the condition that the consumer view the advertising, (6) receiving a request from a consumer to view the advertising, (7) facilitating the display of advertising and any required interaction with the advertising, (8) allowing the consumer access to the associated media product after such display and interaction, if any, (9) recording this transaction in an activity log, and (10) receiving payment from the advertiser. '545 patent col.8 ll.5-48. Many of these steps are likely to require intricate and complex computer programming. In addition, certain of these steps clearly require specific application to the Internet and a cyber-market environment. One clear example is the third step, "providing said media products for sale on an

Internet website.” *Id.* col.8 ll.20-21. And, of course, if the products are offered for sale on the Internet, they must be “restricted”—step four—by complex computer programming as well. Viewing the subject matter as a whole, the invention involves an extensive computer interface. This court does not define the level of programming complexity required before a computer-implemented method can be patent-eligible. Nor does this court hold that use of an Internet website to practice such a method is either necessary or sufficient in every case to satisfy § 101. This court simply find the claims here to be patent-eligible, in part because of these factors.

In this context, this court examines as well the contention that the software programming necessary to facilitate the invention deserves no patent protection or amounts to abstract subject matter or, in the confusing terminology of machines and physical transformations, fails to satisfy the “particular machine” requirement. This court confronted that contention nearly two decades ago in the en banc case of *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994). At that time, this court observed that “programming creates a new machine, because a general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.” *Id.* at 1545. As computer scientists understand:

the inventor can describe the invention in terms of a dedicated circuit or a process that emulates that circuit. Indeed, the line of demarcation between a dedicated circuit and a computer algorithm accomplishing the identical task is

frequently blurred and is becoming increasingly so as the technology develops. In this field, a software process is often interchangeable with a hardware circuit.

Id. at 1583 (J. Rader, concurring). In other words, a programmed computer contains circuitry unique to that computer. That “new machine” could be claimed in terms of a complex array of hardware circuits, or more efficiently, in terms of the programming that facilitates a unique function. The digital computer may be considered by some the greatest invention of the twentieth century, and both this court and the Patent Office have long acknowledged that “improvements thereof” through interchangeable software or hardware enhancements deserve patent protection. Far from abstract, advances in computer technology—both hardware and software—drive innovation in every area of scientific and technical endeavor.

This court understands that the broadly claimed method in the ’545 patent does not specify a particular mechanism for delivering media content to the consumer (i.e., FTP downloads, email, or real-time streaming). This breadth and lack of specificity does not render the claimed subject matter impermissibly abstract. Assuming the patent provides sufficient disclosure to enable a person of ordinary skill in the art to practice the invention and to satisfy the written description requirement, the disclosure need not detail the particular instrumentalities for each step in the process.

That a process may be patentable, irrespective of the particular form of the instrumentalities used, cannot be disputed. If one of the steps of a

process be that a certain substance is to be reduced to a powder, it may not be at all material what instrument or machinery is used to effect that object, whether a hammer, a pestle and mortar, or a mill.

Benson, 409 U.S. at 69-70 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)). Moreover, written description and enablement are conditions for patentability that title 35 sets “wholly apart from whether the invention falls into a category of statutory subject matter.” *Diehr*, 450 U.S. at 190 (quoting *In re Bergy*, 596 F.2d 952, 961 (C.C.P.A. 1979)). The “coarse eligibility filter” of § 101 should not be used to invalidate patents based on concerns about vagueness, indefinite disclosure, or lack of enablement, as these infirmities are expressly addressed by § 112. *See* 35 U.S.C. § 112; *see also Research Corp.*, 627 F.3d at 869 (“In section 112, the Patent Act provides powerful tools to weed out claims that may present a vague or indefinite disclosure of the invention.”).

Finally, the '545 patent does not claim a mathematical algorithm, a series of purely mental steps, or any similarly abstract concept. It claims a particular method for collecting revenue from the distribution of media products over the Internet. In a recent case, this court discerned that an invention claimed an “unpatentable mental process.” *CyberSource Corp. v. Retail Decisions, Inc.*, No. 2009-1358, 2011 WL 3584472, at *3 (Fed. Cir. Aug. 16, 2011). The eligibility exclusion for *purely* mental steps is particularly narrow. *See Prometheus Labs.*, 628 F.3d at 1358 (noting that claims must be considered as a whole and that “the presence of mental steps [in a

claim] does not detract from the patentability of [other] steps”). Unlike the claims in *CyberSource*, the claims here require, among other things, controlled interaction with a consumer via an Internet website, something far removed from *purely* mental steps.

In sum, as a practical application of the general concept of advertising as currency and an improvement to prior art technology, the claimed invention is not “so manifestly abstract as to override the statutory language of section 101.” *Research Corp.*, 627 F.3d at 869. Accordingly, this court reverses the district court’s dismissal of Ultramercial’s patent claims for lack of subject matter eligibility and remands for further proceedings. This decision does not opine at all on the patentability of the claimed invention under the substantive criteria set forth in § 102, § 103, and § 112.

REVERSED AND REMANDED

APPENDIX F

JS-6

**UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA**

Case No. CV 09-06918 RGK (PLAx)

[Filed August 13, 2010]

ULTRAMERCIAL, LLC et al.)
)
 v.)
)
HULU, LLC, et al.)
)

CIVIL MINUTES - GENERAL

Present: The Honorable R. GARY KLAUSNER, U.S.
DISTRICT JUDGE

Sharon L. Williams
Deputy Clerk

Not Reported
Court Reporter / Recorder

Attorneys Present for Plaintiffs:

Not Present

Attorneys Present for Defendants:

Not Present

Proceedings: (IN CHAMBERS) Order re:
Defendants' Motion to Dismiss (DE 26 and 29)

I. INTRODUCTION

This is a patent infringement suit brought by Plaintiff Ultramercial, LLC (“Plaintiff”) against Defendants Hulu, LLC and Wildtangent, Inc. (collectively, “Defendants”) for alleged infringement of U.S. Patent No. 7,346,545 (the ‘545 patent).¹ Because the Court finds that the ‘545 patent does not cover patentable subject matter, it **GRANTS** Wildtangent, Inc.’s Motion to Dismiss (DE 29). Hulu, LLC’s Motion to Dismiss (DE 26) is **DENIED as moot**.

II. BACKGROUND

The ‘545 patent claims an invention for distributing copyrighted products over the Internet (or other networks). In particular, the ‘545 patent discloses a method for allowing Internet users to view copyrighted material free of charge in exchange for watching certain advertisements. A computer or a server acts as a gateway between the Internet user and the copyrighted material. An advertisement sponsor may purchase advertising space for a particular copyrighted material (a television show episode for example). Upon attempting to stream a “free” television show episode, for example, the Internet user will be presented with advertisement. The user cannot view the copyrighted material until the ad is fully displayed. The result is that the viewer gets to watch what he wants for free, and the sponsor gets to deliver its advertisement to the intended audience.

¹ The Complaint originally named Youtube, LLC, as the third defendant. The parties, however, have already stipulated to Youtube, LLC’s dismissal.

The two independent claims of the '545 patent are claims 1 and 8. Claim 1, in its entirety, discloses a number of steps that comprise the process of displaying advertisement in exchange for access to copyrighted media. The steps are 1) receiving media from content provider, 2) selecting an ad after consulting an activity log to determine how many times the ad has been played and how many more times it need be played, 3) offering media products on the Internet, 4) restricting general public access to the media, 5) offering various media to customers for free in exchange for their watching the selected ad, 6) receiving a request to view the media from the Internet user, 7) facilitating the display of the ad, 8) allowing the Internet user access to the media, 9) same as 8 but for interactive media, 10) recording the transaction in the activity log, and 11) receiving payment from sponsor for the ad.

The second independent claim (claim 8) is almost identical to claim 1. The differences between the two independent claims are not material for the purpose of this Order. The remaining (dependent) claims add more "steps" to those in the independent claims. For example, claim 2 discloses "the step of paying royalties to the content provider." Claim 3 discloses "the step of entering into a licensing agreement with the owner of the intellectual property." Claim 4 discloses "the step of barring the content provider from pretending to be a customer" [to make sure the content provider cannot artificially inflate the view count]. Claim 5 discloses "the step of tendering payment to the content provider." Claim 6 discloses "the step of issuing [] a password" to the Internet user." Claim 7 discloses "the step of verifying a submitted password." And so on.

III. JUDICIAL STANDARD

A party may move to dismiss for failure to state a claim upon which relief can be granted under Federal Rule of Civil Procedure 12(b)(6). Fed. R. Civ. P. 12(b)(6). In deciding a Rule 12(b)(6) motion, the Court must assume that the plaintiff's allegations are true and construe the complaint in the light most favorable to the non-moving party. *Cahill v. Liberty Mut. Ins. Co.*, 80 F.3d 336, 337-38 (9th Cir. 1996). Dismissal is appropriate only where the complaint lacks a cognizable legal theory or sufficient facts to support a cognizable legal theory. *Mendondo v. Centinela Hosp. Med. Ctr.*, 521 F.3d 1097, 1104 (9th Cir. 2008). "While a complaint attacked by a Rule 12(b)(6) motion to dismiss does not need detailed factual allegations, a plaintiff's obligation to provide the 'grounds' of his 'entitlement to relief' requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do." *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 555 (2007) (quoting *Papasan v. Allain*, 478 U.S. 265, 286 (1986)). The court need not accept as true unreasonable inferences, unwarranted deductions of fact, or conclusory legal allegations cast in the form of factual allegations. *W. Mining Council v. Watt*, 643 F.2d 618, 624 (9th Cir. 1981).

IV. DISCUSSION

Under the Patent Act of 1952, subject matter patentability is a threshold requirement. 35 U.S.C § 101. "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." *Id.* Recently in *Bilski v.*

Kappos, __ U.S. __, 130 S.Ct. 3218, 3225 (2010), the Supreme Court emphasized again that excluded from the patentable subject matter are “laws of nature, natural phenomena, and abstract ideas.”

Here, Defendants argue that Plaintiff’s ‘545 patent does not disclose patentable subject matter. Originally, this Motion was filed before the Supreme Court handed down the decision in *Bilski*, 130 S.Ct. at 3218. In order to benefit from the Supreme Court’s guidance on the law regarding patentable subject matter and because of similarities between the case at hand and *Bilski*, this Court stayed the case until the Supreme Court issued its opinion. Thereafter the parties filed supplemental briefings, in which they each provide their account of how the Supreme Court’s decision helps their case. After having reviewed the filings and the relevant case law in full, this Court finds that the ‘545 patent does not disclose patentable subject matter. Not only does the patent fail the machine or transformation test, it claims an abstract idea. Therefore, Plaintiff’s Complaint should be dismissed.

A. The ‘545 Patent Does Not Satisfy the Machine or Transformation Test

In *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008), the Federal Circuit held that a process is not patentable unless it is “tied to a particular machine,” or “transforms an article.” The en banc decision produced various concurring and dissenting opinions, all of which need not be discussed here. It suffices to mention that the so called “machine or transformation test,” according to the majority, was the sole test for patentability of processes, including business method and software patents. *Id.* And since the invention at

issue in *Bilski*—a method for hedging investments—did not meet the test, it was held to be invalid. *Id.*

On Supreme Court review, all Justice agreed that the *Bilski* patent was not covered by patentable subject matter. 130 S.t at 3218. How one gets to that conclusion, however, the Justices did not agree. The majority opinion thought it too broad to categorically invalidate all patents that do not meet the machine or transformation test. *Id.* at 3226. The machine or transformation test, according to the Supreme Court, provided a “useful and important clue,” but it was not determinative in all situations. *Id.* at 3227. Instead, the inquiry should be whether the claimed invention is a “law of nature, physical phenomena,” or an “abstract idea[].” *Id.* at 3226. Yet the Supreme Court did not offer an example of an invention that would not be tied to a machine or transform an article and still pass the subject matter test. The Court stopped at holding that the *Bilski* patent disclosed an abstract idea—the idea of hedging investments—and therefore, regardless of the machine or transformation test, it was invalid. *Id.* at 3230-31.

It is important to note, however, that even after the Supreme Court’s decision in *Bilski*, the machine or transformation test appears to have a major screening function—albeit not perfect— that separates unpatentable ideas from patentable ones. Indeed, four of the Justices, listed on Justice Stevens’s concurring opinion, would have taken the machine or transformation test to its logical limit to hold that business methods are categorically unpatentable. *Id.* at 3257 (Stevens, J., concurring). Joining a concurring opinion, Justice Scalia, who signed on to parts of the

plurality opinion as well, would not hold all business methods unpatentable, but would agree with Justice Breyer that “not [] many patentable processes lie beyond [the] reach [of the machine or transformation test].” *Id.* at 3258 (Breyer, J., concurring). In sum, at least five (and maybe all) Justices seem to agree that the machine or transformation test should retain much of its utility after the Supreme Court’s decision in *Bilski*. Therefore, even though the machine or transformation is no longer the litmus test for patentability, the Court will use it here as a key indicator of patentability.

Turning to the mechanics of the test itself, the Court notes that not every patent that recites a machine or transformation of an article passes the machine or transformation test. *Bilski*, 545 F.3d at 961. A mere recitation of a machine or transformation in the claim will not suffice because “[i]nsignificant postsolution activity will not transform an unpatentable principle into a patentable process.” *Id.* The machine or transformation “must impose meaningful limits on the claim’s scope to impart patent-eligibility.” *Id.* (citation omitted). Below, the Court finds that the ‘545 patent does not satisfy the machine or transformation test.

1. *The ‘545 Patent Is Not Tied to a Machine*

A machine is a “concrete thing, consisting of parts or of certain devices and combination of devices.” *In re Ferguson*, 558 F.3d 1359, 1364 (Fed. Cir. 2009).² Yet,

² It was undisputed in *Bilski* that the machine part of the machine or transformation test was not satisfied. 545 F.3d at 962.

physical steps are not needed to allow a process claim to be patentable. *In re Bilski*, 545 F.3d at 961. As long as the invention is tied to a machine or transforms an article, it may be patentable notwithstanding its lack of physical steps. *Id.*

The two independent claims of the '545 patent recite the steps of exchanging media for advertisement viewing. There are only three points in the '545 patent that the parties have identified as a possible reference to a machine. The first two ("facilitator" and "Internet") appear in the independent claims (1 and 8): "A method for distribution of products over the Internet via a facilitator." The third appears in dependent claim 16: "The method . . . wherein media product accessed by the consumer is downloaded to a memory of a personal computer of the consumer." The Court finds that none of the three satisfy the machine prong of the test.

Despite Plaintiff's argument, the "facilitator" recitation does not meet the machine requirement. First, there is no reason to read "facilitator" as a machine such as a computer. Indeed, the patent specification suggests the contrary: the schematics in the patent specification depict the facilitator as a person. Moreover, the '545 patent explains that the facilitator may "communicate through . . . telephony, facsimile, courier, mail or even person-to-person meeting." The specification makes it clear, therefore, that the '545 patent is not aimed at a computer-specific application; it is a broad claim to the concept of exchanging media for advertisement viewing.

Therefore, *Bilski* does not provide much guidance on how to apply the machine prong of the test.

Neither does the “Internet” recitation save the patent. First, this Court agrees with the District Court in the Northern District of California that held the Internet is not a machine. *CyberSource Corp. v. Retail Decisions, Inc.*, 620 F. Supp. 2d 1068 (N.D. Cal. 2009) (“[T]he Internet is an abstraction.” “One can touch a computer or a network cable, but one cannot touch ‘the internet.’”). In *CyberSource*, the court held that methods for “detecting fraud in credit card transaction between consumer and merchant *over the Internet* were not tied to a specific machine.” *Id.* at 1077-78 (emphasis added). This Court agrees in full with the court’s reasoning in *CyberSource* to the effect that the “over the Internet” recitation does not make an otherwise unpatentable idea patentable. *Id.*

Finally, the mere act of storing media on computer memory does not tie the ‘545 invention to a machine in any meaningful way. Since Plaintiff does not argue this point, the Court will not address it in detail. It suffices to say, however, that the argument would have been too farfetched and hence futile.

Plaintiff makes two counter arguments that need be addressed. First, Plaintiff points to many steps in the ‘545 patent that, according to Plaintiff, address computer-specific functions (such as issuing and verifying passwords, transmitting an ad until it is timed out, making content physically available to the consumer, etc.). (Pl. Opp., at 16.) Second, Plaintiff argues that the segments of the patent specification quoted here only says that “some communication [may] take place without a programmed machine (e.g., communication between a IP rights holder and interposed sponsor),” but “all communication between

the consumer and facilitator take place utilizing a specifically-programmed computer.”³ (Pl. Opp., at 17:25-18:15.) In sum, Plaintiff argues that the ‘545 patent is computer-specific and not a broad invention that may be performed by a person. As a result, Plaintiff suggests that the ‘545 patent meets the machine prong of the test.

Plaintiff’s argument is unavailing. There is nothing inherently computer-specific about receiving media from a content provider, choosing a sponsor for the media, selecting an ad for the sponsor, verifying the viewer’s activity, assigning passwords, charging the sponsor for the advertisement, or any of the remaining steps.

Yet Plaintiff is perhaps still correct to point out that the only useful application of Plaintiff’s invention is with relation to the Internet, where the facilitator is a

³ The preferred embodiment specification states in pertinent part,

In accordance with the preferred embodiment, four principals are preferably present: a facilitator, a consumer, an intellectual property (IP) rights holder, and an interposed sponsor. All of the principals preferably communicate over a telecommunications network such as the Internet, using their respective computers: facilitator’s computer, consumer’s computer, IP rights holder’s computer 30A and interposed sponsor’s computer. Three of the principals (facilitator, IP rights holder and interposed sponsor) may also communicate through a twoway communications path, which may include telephony, facsimile, courier, mail or even person-to- person meetings.

specifically “programmed computer.”⁴ That does not mean, however, that the patent claims are limited to use on a computer, or, more importantly, that they are *tied* to one. That the disclosed invention is only used on computers or computer networks cannot alone satisfy the machine test without rendering the test completely toothless.⁵ As already stated above, the machine must limit the invention in a meaningful way. One cannot circumvent the patentability test by merely limiting the use of the invention to a computer. The binary representation, one of the most fundamental concepts that has enabled digital computation as we know it today was not patentable, even though its utility was linked to “general-purpose digital computers.” *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972). Similarly in the case of the ‘545 patent, the concept of advertisement-media-exchange does not become patentable simply because the patentee claims to have limited its application to the Internet or computers. Therefore, the ‘545 patent fails the machine test.

⁴ The “programmed computer” argument has its origin in *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994). That decision articulated the “useful, concrete, and tangible result” test for patentable subject matter, which was subsequently abrogated by the Federal Circuit in *Bilski* 545 F.3d at 959-60.

⁵ The Court is aware that software patents or other method patents that involve programmed computers have never been categorically rejected under the patentable subject matter test. *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972) (declining to hold that all patents for any “program servicing a computer” are invalid under § 101).

2. *The '545 Patent Does Not Transform an Article*

There can be little dispute that the '545 patent does not transform an article. "Transformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines." *Id.* at 70. None of the patent claims disclose a transformation. Plaintiff points to claim 16, which recites, "The method . . . wherein media product accessed by the consumer is downloaded to a memory of a personal computer of the consumer." Yet the mere transfer of data from one memory disk on one computer to another memory space in a second computer is not "transformation of article" under § 101. And the parties have not pointed out a case that held otherwise. That is not surprising: the nature of the computer memory does not vary based on what is stored in it. And even if storing content on a computer memory constituted transforming an article, Plaintiff's argument would still fail because such "transformation" is merely incidental to the '545 patent claims. What Plaintiff claims is the process of trading viewing of the advertisements for free access to media. That the media may be transferred from one computer (or server) to another is merely incidental. *Cf. Diamond v. Diehr*, 450 U.S. 175 (1981) (holding that the method of using temperature readings from a rubber press and inputting the reading in a well-known mathematical formula to determine accurately the cure-time was patentable because the process was meaningfully limited to transformation of an article). Unlike in *Diehr*, the '545 patent does not disclose a method for transforming an article, or the transformation disclosed is not a meaningful limitation

to the claimed invention. Therefore, the transformation prong of the test is also not satisfied.

B. The '545 Patent Discloses an Abstract Idea

In *Bilski*, the Supreme Court held that a method for hedging investments was an abstract idea and hence unpatentable. 130 S.Ct. at 3218. Claim 1 of the *Bilski* patent simply disclosed a number of steps in a particular hedging method: 1) trading commodity with a buyer at a price based on historical averages and the buyer's risk position, 2) finding buyers that have another type of risk position that counters the first buyer in step one, and 3) transacting with the second consumer in a way to balance (hedge) the risk of the transaction. *Id.* at 3223-24. The patent then went on to disclose the application of this method in trading energy commodities. *Id.* at 3224.

In rejecting the patent, the Supreme Court first noted that "hedging is a fundamental economic practice." *Id.* at 3231. Therefore, the core of the patent was not patentable because "allowing petitioners to patent risk hedging would pre-empt use of this approach in all fields." *Id.* Moreover, the remaining recitations did not rescue the patent because they were only "broad examples of how hedging can be used in commodities and energy markets." *Id.* Since the core of the patent was an abstract idea, and the additional limitations did not meaningfully contain the claimed invention, the *Bilski* invention was not patentable.

The case at hand is very similar. At the core of the '545 patent is the basic idea that one can use advertisement as an exchange or currency. An Internet

user can pay for copyrighted media by sitting through a sponsored message instead of paying money to download the media. This core principle, similar to the core of the *Bilski* patent, is an abstract idea. Indeed, public television channels have used the same basic idea for years to provide free (or offset the cost of) media to their viewers.⁶ At its heart, therefore, the patent does no more than disclose an abstract idea.

Also similar to the patent in *Bilski*, the added features, examples, or limitations of the '545 patent do not make it patentable. That the exchange (advertisement for media) is carried over the Internet, through a facilitator, using passwords and activity logs, does not limit the patent in a meaningful way. The patent still discloses an abstract idea garnished with accessories. If the claimed invention here were patentable, it would “preempt use of this [method] in all fields.” *Id.*

Two points need be made clear at the end. One is that the Court rejects Plaintiff's argument that this Motion should not be decided before claim construction. While the Court (and the parties) consulted the claims and the specification, there is no need to formally construe any of the claims. The patent terms are clear, and Plaintiff has not brought to the Court's attention any reasonable construction that would bring the

⁶ The Court is cognizant of the difference between patentable subject matter and obviousness requirements. The point made here is that the core of the disclosed invention is an abstract principle similar to the hedging principle in *Bilski*; lack of novelty is not the (intended) message. Although the invention here may be obvious, that determination is not before the Court.

APPENDIX G

NOTE: This order is nonprecedential.

**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

2010-1544

[Filed February 20, 2015]

ULTRAMERCIAL, INC. AND)
ULTRAMERCIAL, LLC,)
Plaintiffs-Appellants,)
)
v.)
)
WILDTANGENT, INC.,)
Defendant-Appellee.)
)

Appeal from the United States District Court for the
Central District of California in No. 09-CV-6918, Judge
R. Gary Klausner.

ON PETITION FOR REHEARING EN BANC

102a

Before PROST, *Chief Judge*, NEWMAN, MAYER,*
LOURIE, DYK, O'MALLEY, REYNA, WALLACH, TARANTO,
CHEN, and HUGHES, *Circuit Judges*.**

PER CURIAM.

ORDER

Appellants Ultramercial, Inc. and Ultramercial, LLC filed a petition for rehearing en banc. The petition was first referred as a petition for rehearing to the panel that heard the appeal, and thereafter the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on February 27, 2015.

FOR THE COURT

/s/ Daniel E. O'Toole
Daniel E. O'Toole
Clerk of Court

February 20, 2015

Date

* Circuit Judge Mayer participated only in the petition for panel rehearing.

** Circuit Judge Moore did not participate.

APPENDIX H

STATUTORY PROVISIONS INVOLVED

35 U.S.C. § 100(b)

TITLE 35. PATENTS

PART II. PATENTABILITY OF INVENTIONS AND
GRANT OF PATENTS

CHAPTER 10. PATENTABILITY OF INVENTIONS

§ 100. Definitions [Caution: See prospective amendment below.]

When used in this *title* [35 USCS §§ 1 et seq.] unless the context otherwise indicates--

* * *

(b) The term “process” means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.

* * *

35 U.S.C. § 101

§ 101. Inventions patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this *title* [35 USCS §§ 1 et seq.].