



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

2010-1544

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

772 F.3d 709; 2014 U.S. App. LEXIS 21633; 112 U.S.P.Q.2D (BNA) 1750

November 14, 2014, Decided

SUBSEQUENT HISTORY: US Supreme Court certiorari denied by *Ultramercial v. Wildtangent, Inc.*, 2015 U.S. LEXIS 4411 (U.S., June 29, 2015)

PRIOR HISTORY: [**1] Appeal from the United States District Court for the Central District of California in No. 09-CV-6918, Judge R. Gary Klausner. *WildTangent, Inc. v. Ultramercial, LLC*, 134 S. Ct. 2870, 189 L. Ed. 2d 828, 2014 U.S. LEXIS 4647 (U.S., 2014) *Ultramercial, LLC v. Hulu, LLC*, 2010 U.S. Dist. LEXIS 93453 (C.D. Cal., Aug. 13, 2010)

DISPOSITION: AFFIRMED.

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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 [**2] AGUILAR.

JUDGES: Before LOURIE, MAYER,* and O'MALLEY, Circuit Judges. Opinion for the court filed by Circuit Judge LOURIE. Concurring Opinion filed by Circuit Judge MAYER.

* 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 BY: LOURIE

OPINION

[*711] [***1752] 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, 182 L. Ed. 2d 1059

(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 U.S. Dist. LEXIS 93453, 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. [*712] 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 patenteligible subject matter and accordingly [***3] 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 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 cy-

cles contracted by the sponsor of the sponsor message;

a third step of providing [**4] 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 **[**5]** step of receiving payment from the sponsor of the sponsor message displayed.

[*1753]** '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 U.S. Dist. LEXIS 93453, 2010 WL 3360098, at *1. Hulu and YouTube were dismissed from the case for reasons we need not **[*713]** 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 U.S. Dist. LEXIS 93453, 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. 2010 U.S. Dist. LEXIS 93453, [WL] 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, 182 L. Ed. 2d 321 (2012). *WildTangent*, 132 S. Ct. 2431, 182 L. Ed. 2d 1059.

On remand, we again reversed, concluding **[**6]** 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, 189 L. Ed. 2d 828 (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, 189 L. Ed. 2d 296 (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, 189 L. Ed. 2d 828. 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 **[**7]** 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 **[*714]** 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, 186 L. Ed. 2d 124 (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 pa-

tent-ineligible [**8] 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 [**1754] 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, [**9] 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 U.S. Dist. LEXIS 93453, 2010 WL 3360098, at *6. We agree. [**10]

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 [**715] 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 [**11] 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 [**12] 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 [**1755] 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 pa-

tent-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 [**13] 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 [**716] 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 [**14] 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, 177 L. Ed. 2d 792

(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 [**15] 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, 189 L. Ed. 2d 832 (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, 130 S. Ct. 3218, 177 L. Ed. 2d 792.

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. [***1756] *CyberSource*, 654 F.3d at 1370. It is a ubiquitous information-transmitting medium, not [**717] 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 [**16] 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 [**17] 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

CONCUR BY: MAYER

CONCUR

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, 189 L. Ed. 2d 296 (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, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966); see also *In re Yuan*, 188 F.2d 377, 380, 38 C.C.P.A. 967, 1951 Dec. Comm'r Pat. 286 (CCPA 1951) (explaining that the constitutional grant of authority to issue patents "is the only one of [**18] 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 [**718] 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, 182 L. Ed. 2d 321 (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, 37 S. Ct. 416, 61 L. Ed. 871, 1917 Dec. Comm'r Pat. 391 (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, 130 S. Ct. 3218, 177 L. Ed. 2d 792 (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, 98 S. Ct. 2522, 57 L. Ed. 2d 451 (1978) ("*Flook*") ("The obligation to determine what [**19] type of discovery is sought to be patented" so as to determine [***1757] 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), [**20] 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, 80 S. Ct. 391, 4 L. Ed. 2d 373 (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, [**719] 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, 127 S. Ct. 1955, 167 L. Ed. 2d 929 (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 [**21] construction that would bring [them] within patentable subject matter." *Ultramercial, LLC v. Hulu, LLC*, No. 09-CV-6918, 2010 U.S. Dist. LEXIS 93453, 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. [**22] . (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, 113 S. Ct. 1967, 124 L. Ed. 2d 1 (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. [***1758] *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 [**23] 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 [**720] resolution of eligibility is even more compelling. *See Pope Mfg. Co. v. Gormully*, 144 U.S. 224, 234, 12 S. Ct. 632, 36 L. Ed. 414, 1892 *Dec. Comm'r Pat.* 343 (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, 186 L. Ed. 2d 124 (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 [**24] 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, 127 S. Ct. 1727, 167 L. Ed. 2d 705 (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 [**25] 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 [**721] 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, 180 L. Ed. 2d 131 (2011), no equivalent

presumption of eligibility applies in the *section 101* calculus.

III.

Alice recognized that [**26] the patent system does not extend to all products of human ingenuity. [***1759] 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, 14 L. Ed. 601 (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, 101 S. Ct. 1048, 67 L. Ed. 2d 155 (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 [**27] do not count.

1 The 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.

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 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 [**28] 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 [**722] 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 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, 59 S. Ct. 427, 83 L. Ed. 506, 1939 Dec. Comm'r Pat. 857 (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 [**29] 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 [***1760] for curing rubber and their reach was confined to a particular industrial application.

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 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 [**30] those patents which stifle technological progress and unjustifiably impede the free flow of ideas and information.

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; 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 [**31] 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," [**723] 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, 68 S. Ct. 440, 92 L. Ed. 588, 1948 Dec. Comm'r Pat. 671 (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 assert-

772 F.3d 709, *; 2014 U.S. App. LEXIS 21633, **;
112 U.S.P.Q.2D (BNA) 1750, ***

ed by Ultramercial, which "simply instruct the practitioner [**32] to implement [an] abstract idea . . . on a

generic computer," *Alice*, 134 S. Ct. at 2359, do not pass muster under *section 101*.