

# United States Court of Appeals for the Federal Circuit

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**INTERNET PATENTS CORPORATION,  
f/k/a Insweb Corporation,  
*Plaintiff-Appellant***

v.

**ACTIVE NETWORK, INC., THE GENERAL  
AUTOMOBILE INSURANCE SERVICES, INC.,  
d/b/a The General, Permanent General Assurance  
Corporation, PERMANENT GENERAL  
ASSURANCE CORPORATION OF OHIO,  
QUINSTREET, INC., TREE.COM, INC.  
*Defendants-Appellees***

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2014-1048, 2014-1061, 2014-1062, 2014-1063

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Appeals from the United States District Court for the Northern District of California in Nos. 3:12-cv-05036-JSW, 3:12-cv-05035-JSW, 3:12-cv-06506-JSW, 3:12-cv-06505-JSW, Judge Jeffrey S. White.

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Decided: June 23, 2015

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JOSEPH GRECO, Beck, Ross, Bismonte & Finley, LLP, San Jose, CA, argued for plaintiff-appellant. Also represented by JUSTIN BECK, KIMBERLY ZAPATA.

MATTHEW D. MURPHEY, Troutman Sanders LLP, Irvine, CA, argued for defendant-appellee Active Network, Inc. Also represented by MEGHAN CANTY SHERRILL.

JOHN FRANCIS TRIGGS, Patterson Intellectual Property Law, P.C., Nashville, TN, argued for defendants-appellees The General Automobile Insurance Services, Inc., Permanent General Assurance Corporation of Ohio, Quinstreet, Inc. Defendants-appellees The General Automobile Insurance Services, Inc., Permanent General Assurance Corporation of Ohio also represented by RYAN D. LEVY. Defendant-appellee Quinstreet, Inc., represented by THOMAS F. FITZPATRICK, ANDY H. CHAN, Pepper Hamilton LLP, Redwood City, CA.

STEPHEN S. KORNICZKY, Sheppard, Mullin, Richter & Hampton LLP, San Diego, CA, argued for defendant-appellee Tree.com, Inc. Also represented by EDWARD V. ANDERSON, DEEPALI BRAHMBHATT, MICHAEL MURPHY.

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Before NEWMAN, MOORE, and REYNA, *Circuit Judges*.

NEWMAN, *Circuit Judge*.

Internet Patents Corporation (IPC) appeals the judgments of the United States District Court for the Northern District of California, dismissing the complaints in four related actions for infringement of U.S Patent No. 7,707,505 (the '505 Patent) on the ground of patent ineligibility under 35 U.S.C. §101.<sup>1</sup>

IPC had filed suits for infringement of the '505 Patent against The General Automobile Insurance Services, Inc.

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<sup>1</sup> *Internet Patents Corp. v. Gen. Auto. Ins. Servs., Inc.*, 29 F. Supp. 3d 1264 (N.D. Cal. 2013) (“Dist. Ct. Op.”).

(“The General”); Active Network, Inc. (“Active”); Tree.com, Inc. (“Tree.com”); and QuinStreet, Inc. (“QuinStreet”). The district court, applying 35 U.S.C. §101, held the ’505 Patent invalid for failure to meet the eligibility requirements of patentable subject matter. IPC appealed, and while the appeal was pending, the Supreme Court decided *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347 (2014). We requested, and received, supplemental briefing addressing the relevance of *Alice* to this case. We now affirm the judgment of the district court.

#### BACKGROUND

As the district court stated, the ’505 Patent claims “the use of a conventional web browser Back and Forward navigational functionalities without data loss in an online application consisting of dynamically generated web pages.” Dist. Ct. Op. at 1269. The court described the ’505 Patent subject matter as “retaining information lost in the navigation of online forms,” *id.*, and deemed this to be an abstract concept and thus ineligible for patenting:

The Court finds that by setting out the abstract idea of a known technological challenge without setting out any specific disclosures, the Patent “added no elements or combination of elements, sometimes referred to as the inventive concept, sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law [or the abstract idea].”

*Id.* (alteration in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012)).

Claim 1 is the broadest claim:

1. A method of providing an intelligent user interface to an online application comprising the steps of:

furnishing a plurality of icons on a web page displayed to a user of a web browser, wherein each of said icons is a hyperlink to a dynamically generated online application form set, and wherein said web browser comprises Back and Forward navigation functionalities;

displaying said dynamically generated online application form set in response to the activation of said hyperlink, wherein said dynamically generated online application form set comprises a state determined by at least one user input; and

maintaining said state upon the activation of another of said icons, wherein said maintaining allows use of said Back and Forward navigation functionalities without loss of said state.

A principal issue is whether the additional limitations in other claims of the '505 Patent rescue this method from ineligible abstraction. IPC argues that the invention is not an abstract idea, but a tangible and useful improvement over prior computer-implemented methods of entering information into online application forms. The specification states:

In contrast to the prior art, the present system, in all its embodiments, maintains virtual application information, relative dependencies, and information context obtained and/or derived from each pane accessed by the user/applicant.

'505 Patent, col. 9 ll. 60-66. IPC states that the specified limitations remove the claims from abstraction, citing the "maintaining state" limitation, the furnishing of icons as separate hyperlinks to an online application, and using the Back and Forward buttons without losing data previously entered in the application form. IPC states that its

method is a technical advance over the prior art, referring to the Court's guidance in *Alice*.

The district court held that the several claimed steps did not add an inventive concept, including the "maintaining state" limitation on which IPC focuses on appeal.

## DISCUSSION

### I

Section 101 defines patent eligible subject matter as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." Precedent has long established that eligible subject matter does not include laws of nature, natural phenomena, and abstract ideas. Other than as so limited, the patent system is described as available to "anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980) (quoting S. Rep. No. 1979, 82d Cong., 2d Sess., 5 (1952); H.R. Rep. No. 1923, 82d Cong., 2d Sess., 6 (1952)). Yet the technologies of recent decades have challenged the understandings of a simpler past.

Recently, the courts have focused on the patent eligibility of "abstract ideas," for precision has been elusive in defining an all-purpose boundary between the abstract and the concrete, leaving innovators and competitors uncertain as to their legal rights. The present framework starts with the case of *Bilski v. Kappos*, 561 U.S. 593 (2010), where the Court held that the generally known idea of hedging commodities is not rescued from "abstraction" through the use of computer technology.

In *Mayo, supra*, the Court introduced the "inventive concept" protocol to probe the categories of laws of nature, natural phenomena, and abstract ideas. The Court set forth a two-step methodology for determining patent-eligible subject matter. "First, we determine whether the claims at issue are directed to one of those patent-

ineligible concepts.” *Alice*, 134 S. Ct. at 2355. If so, the court then considers the elements of each claim “both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1298, 1297).

The Court described this second step as “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible] concept itself.” *Alice*, 134 S. Ct. at 2355 (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294). By “consider[ing] all claim elements, both individually and in combination, [this methodology] is consistent with the general rule that patent claims ‘must be considered as a whole.’” *Alice*, 134 S. Ct. at 2355 n.3 (quoting *Diamond v. Diehr*, 450 U.S. 175, 188 (1981)).

Under step one of *Mayo/Alice*, the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter. However, this determination alone does not render the subject matter ineligible. In *Mayo*, the excluded subject matter was a law of nature, “namely, relationships between concentrations of certain metabolites in the blood and the likelihood that a dosage of a thiopurine drug will prove ineffective or cause harm.” 132 S. Ct. at 1296. The Court distilled this ineligible concept from the claims as a whole, and found no inventive concept in routine application of this law of nature.

In *Alice*, the Court found that the claims were directed to the abstract idea of intermediated settlement, and that no claim elements, alone or in combination, provided the inventive concept of patent-eligible subject matter. 134 S. Ct. at 2356. The Court held that the known practice of reducing financial risk by passing funds through a “third-party intermediary” did not lose its

character as an abstract idea. Although computer capability achieved financial activity of a scope not previously available, no inventive concept was found in the claims, for the “computer functions are ‘well-understood, routine, conventional activities’ previously known to the industry.” *Id.* at 2359 (quoting *Mayo*, 132 S. Ct. at 1294).

The two-step analytic protocol introduced in *Mayo* directs attention to whether the claim contains an “inventive concept.” Determination of what is an inventive concept favors inquiries analogous to those undertaken for determination of patentable invention, for a known idea, or one that is routine and conventional, is not inventive in patent terms, as the Court found in *Bilski*, *Mayo*, and *Alice*. For *Bilski* and *Alice*, the conventional idea was based on the use of computers to conduct known forms of financial transactions. For *Mayo*, the Court held that metabolism of the drug thiopurine is a law of nature, and that instructing physicians to administer the drug according to its presence in the blood “at most add[s] a suggestion that he should take those [natural] laws into account when treating his patient.” 132 S. Ct. at 1298; *id.* at 1297 (“The relation is a consequence of the ways in which thiopurine compounds are metabolized by the body—entirely natural processes. And so a patent that simply describes that relation sets forth a natural law.”).

Other precedent illustrates that pragmatic analysis of §101 is facilitated by considerations analogous to those of §§102 and 103 as applied to the particular case. The courts have recognized that it is not always easy to determine the boundary between abstraction and patent-eligible subject matter. Recent precedent illustrates this boundary in a variety of factual circumstances. *E.g.*, *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) (claims linked only to a general purpose computer preempted the abstract concept of detecting credit-card fraud based on past transactions); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333-34 (Fed.

Cir. 2012) (“computer aided” mental process claims, unlimited in scope, preempted the idea of “selectively forwarding” credit data); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344-45 (Fed. Cir. 2013) (claims that implemented the abstract idea of generating tasks based on rules on the occurrence of an event, held ineligible because they preempted all practical uses of the abstract concept); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) (claims to a general process for combining two data sets into a device profile were “so abstract and sweeping’ as to cover any and all uses of a device profile” (quoting *Gottschalk v. Benson*, 409 U.S. 63, 68 (1972))).

Precedent illustrates not only the variety of concepts that have been challenged under section 101, but the variety of details that may be included in the specification and the variety of limitations that may be included in the claims. Courts have found guidance in deciding whether the allegedly abstract idea (or other excluded category) is indeed known, conventional, and routine, or contains an inventive concept, by drawing on the rules of patentability. In *Alice*, the Court elaborated that, for a perceived abstract idea, if the claim “contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application,” 134 S. Ct. at 2357 (quoting *Mayo*, 132 S. Ct. at 1294, 1298), then the claims pass the test of eligibility under section 101.

## II

The district court applied these principles to the IPC claims. The court determined that the ’505 Patent claimed “the use of a conventional web browser Back and Forward navigational functionalities without data loss in an online application consisting of dynamically generated web pages.” Dist. Ct. Op. at 1269. The district court described “retaining information lost in the navigation of online forms” as an ineligible abstract idea. *Id.* IPC

argues that the “maintaining state” element of the claim comes directly from the patent specification:

In contrast to the prior art, the present system, in all its embodiments, maintains virtual application information, relative dependencies, and information context obtained and/or derived from each pane accessed by the user/applicant. This state maintenance enables use of standard browser Back and Forward button functions without loss of data and without losing the user's “place” in the application process.

'505 Patent col. 9 ll. 60-66.

In *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1273 (Fed. Cir. 2012), the court observed that “claim construction is not an inviolable prerequisite to a validity determination under § 101.” However, the threshold of §101 must be crossed; an event often dependent on the scope and meaning of the claims.

Applying the guidance of *Bilski*, *Mayo*, and *Alice* to the present appeal, we start by ascertaining the basic character of the subject matter, and then whether there is an “inventive concept” in a claim drawn to some level of abstraction. *Bancorp*, 687 F.3d at 1273-74 (“[T]he determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter.”) For the '505 Patent, the end result of “maintaining the state” is described as the innovation over the prior art, and the essential, “most important aspect”:

The most important aspect of the user interface of the present invention is not that it has tabs or that it enables a certain amount of non-sequential (non-linear) access to the various form sets within a virtual application, but that it maintains data state across all panes.

Col. 9 ll. 45-49. IPC stresses the unconventionality of the claim elements of maintaining the state, furnishing icons on a web page with a browser having Back and Forward navigation functions, and displaying an online application form. IPC Supp. Br. at 9-10.

We agree with the district court that the character of the claimed invention is an abstract idea: the idea of retaining information in the navigation of online forms. *Mayo* notes the insufficiency of “well-understood, routine, conventional activities previously known” to found an “inventive concept.” 132 S. Ct. at 1298. The ’505 Patent specification refers to the “browser Back and Forward button functionality” as “conventional.” Col. 3 ll. 5-10. The specification also refers to the Back and Forward functionality as “well-known” and “common,” *e.g.*, “Furthermore, the common convenience of the ‘Back’ and ‘Forward’ buttons (provided in all well-known Internet browsers) generally does not function properly when filling in online forms.” Col. 2 ll. 37-40.

The specification also states that the use of internet web pages for users to fill out online applications was brought about by “[t]he increasing popularity of the Internet and the World Wide Web,” and describes these online application systems as generating information to the user based on information inputted by the user. Col. 1 ll. 40-60. As the district court observed, claim 1 contains no restriction on how the result is accomplished. The mechanism for maintaining the state is not described, although this is stated to be the essential innovation. The court concluded that the claim is directed to the idea itself—the abstract idea of avoiding loss of data. IPC’s proposed interpretation of “maintaining state” describes the effect or result dissociated from any method by which maintaining the state is accomplished upon the activation of an icon. Thus we affirm that claim 1 is not directed to patent-eligible subject matter.

## III

Independent claims 9 and 17 are identical to claim 1 except that their preambles state “[a] computer system for providing an intelligent user interface to an online application, comprising computer instructions for” (claim 9) and “[a] computer-readable storage medium, comprising computer instructions for” (claim 17). The statement that the method is performed by computer does not satisfy the test of “inventive concept.” *Alice*, 134 S. Ct. at 2360.

Claims 2 and 10 depend from claims 1 and 9, respectively, and recite identical limitations. They read:

2[/10]. The method[/computer system] of claim 1[/9], wherein said displaying said dynamically generated online application form set comprises combining information from a template file and either a database or a conditional merge file or both to form said dynamically generated online application form set.

Claims 7, 15, and 23 depend from claims 1, 9, and 17, respectively, and recite identical limitations. They read:

7[/15/23]. The method[/computer system/computer-readable storage medium] of claim 1[/9/17], wherein said web page comprises quasi-static elements distinct from said dynamically generated online application form set, wherein said displaying said dynamically generated online application form set in response to the activation of said hyperlink affects the display of said quasi-static elements.

The additional limitations of these dependent claims do not add an inventive concept, for they represent merely generic data collection steps or siting the ineligible concept in a particular technological environment. *See Alice*, 134 S. Ct. at 2357 (explaining that “[s]imply appending conventional steps, specified at a high level of generality,”

was not ‘*enough*’ to supply an ‘inventive concept’” (emphasis in original) (quoting *Mayo*, 132 S. Ct. at 1300, 1297, 1294); *id.* at 2358 (“limiting the use of an abstract idea ‘to a particular technological environment’ is “not enough for patent eligibility” (quoting *Bilski*, 561 U.S. at 610-11); *CyberSource*, 654 F.3d at 1370 (“mere [data-gathering] step[s] cannot make an otherwise nonstatutory claim statutory”) (alterations in original) (quoting *In re Grams*, 888 F.2d 835, 840 (Fed. Cir. 1989)).

The motion to dismiss addressed the dependent claims, arguing that they do not contain any limitations that make them patent-eligible. We have considered the arguments and conclude that the criteria of “inventive concept” are not met as to the dependent claims.

#### CONCLUSION

We affirm the district court’s ruling that the claims of the ’505 Patent are directed to ineligible subject matter. The judgment of invalidity of the ’505 Patent claims in terms of section 101 is affirmed.

**AFFIRMED**