

Assessing the Validity of Food Processing Patents, Post-Alice

By Paul D. Swanson

Patent eligibility is in a state of flux. Software and business method innovations challenge the boundary of what is patentable under U.S. law. That dividing line is crossed when inventors claim exclusive rights in what really amount to "laws of nature, natural phenomena or abstract ideas." In a series of recent cases, the Supreme Court construed these three implied judicial exceptions to patent eligibility. *Alice Corp. v. CLS Bank Int'l* is its most recent pronouncement bracketing patent rights.



Since software and computerized business methods now dominate and regulate many aspects of our industrialized food supply chain, how will already-issued food processing patents fare in this patent eligibility battle royale, post-Alice? This article addresses that basic question. A touchstone for this analysis will be a recently invalidated "Meal Builder" patent, a "computerized method and system for diet-related behavior analysis, training and planning." See Dietgoal Innovations LLC v. Chipotle Mexican Grill, Inc. (slip opinion).

Patent Eligibility 101 and the "Useful Arts"

Patent-eligible subject matter is set forth in 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."

When assessed from the standpoint of the Industrial Revolution's technological advancements, the scope of § 101 patent eligibility is generally a non-issue. Inventions that transform physical matter in novel, nonobvious and useful ways were and are in the wheelhouse of patent-eligible subject matter. Technological innovations in agricultural machinery, for example, are classically patent eligible. Indeed, in earlier eras, "agriculture" was deemed one of the "seven mechanical arts" that make up the "useful arts"— as opposed to the "fine arts." Promotion and progress of the "useful arts" is the *raison d'etre* of our patent system's constitutional foundation.

The scope of patent eligibility grew murkier, however, with the ascendancy of computerized technology in the latter 20th century. Large frame computer hardware began whirring away in isolated, air-conditioned rooms, while software programs performed computing functions that appeared to be highly innovative.

At first, institutional resistance arose against issuing patents for software and computerized business methods. However, the formation of a specialized, pro-patenting federal appellate court in 1982 — with its main feature being its exclusive jurisdiction over all patent case appeals — eventually paved the way for the widespread issuance of software and business method patents. The newly formed Federal Circuit based an expansionist interpretation of § 101 patent eligibility on the Supreme Court's 1980 *Chakrabarty* decision. Through an elided quotation from the 1952 Patent Act's legislative history, the *Chakrabarty* opinion proclaimed that patentable subject matter "includes anything under the sun that is made by man."

Hugo von Saint Victor's definition of the mechanical arts included *lanificium* (clothing), *armature* (armor), *navigation*, *agricultura* (agriculture), *venatio* (hunting), *medicina* (medicine) and *ars theatrica* (science of entertainment).

Patent eligibility for software and business method inventions reached a zenith in 1998. The Federal Circuit's *State Street Bank* decision issued that year stood for the proposition that business method inventions are patent-eligible so long as they produce a "useful, concrete and tangible result." Judge Giles S. Rich — the Federal Circuit's most influential judge and the progenitor of the 1952 Patent Act — authored the *State Street Bank* decision. A sea change in patent eligibility had fully evolved.

Thirty-four years after the *Chakrabarty* decision, the Federal Circuit would reverse direction and qualify the Supreme Court's heady pronouncement of "anything under the sun" patent eligibility. The quotation itself had been cherry-picked. More fully, a committee report discussing the proposed 1952 Patent Act reads: "A person may have 'invented' a machine or 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.*" See Ultramercial, Inc. v. Hulu LLC (Judge Mayer concurring opinion; emphasis added in court opinion).

And Then Along Comes Mayo, Myriad and Alice

The Supreme Court reined in the Federal Circuit's expansive interpretation of § 101 patent eligibility through a two-part test established in *Mayo Collaborative Services v. Prometheus Laboratories* (2012). It applied this test in *Ass'n for Molecular Pathology v. Myriad Genetics* (2013), and *Alice Corp. v. CLS Bank Int'l* (2014). The *Alice* recitation of the test can be summarized as follows:

- **Step one** is a determination whether the claims at issue are directed to one of the patent-ineligible concepts, *i.e.*, laws of nature, natural phenomena or abstract ideas. If so, you must then ask, "What else is there in the claims?" To answer that question, you must consider the elements of each claim both individually and "as an ordered combination" to determine whether the additional elements transform the nature of the claim into a patent-eligible application.
- **Step two** is 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. 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. A patent-eligible application requires more than simply stating the abstract idea while adding the words "apply it." In other words, simply implementing a mathematical principle on a computer is not a patentable applicable of that principle. Nor is it permissible to limit the use of an abstract idea to a particular technological environment.

In light of the Supreme Court's *Mayo*, *Myriad* and *Alice* holdings, the United States Patent and Trademark Office (USPTO) issued "Interim Guidance on Patent Subject Matter Eligibility" in December 2014, supplementing and superseding earlier guidance on this topic. *See* http://www.gpo.gov/fdsys/pkg/FR-2014-12-16/pdf/2014-29414.pdf.

One important way software or business method patent applications pass post-*Alice* muster is when the "invention" improves or optimizes the functioning of a computer or the "Internet experience" itself. This is based on *Alice's* observation that the ineligible claims at issue — a patented method for mitigating settlement risk — do not "purport to improve the functioning of the computer itself," nor "do they effect an improvement on any other technology or technical field."

As an example of this patent-saving rule, the Federal Circuit panel recently affirmed the validity of an Internet-based patent in *DDR Holdings, LLC. v. Hotels.com L.P.* A divided panel concluded that that patent at issue — for preserving the "look and feel" of a website across clicking operations to other websites — satisfied the *Alice* test. "In short, the claimed solution amounts to an inventive concept for resolving this particular Internet-centric problem, rendering

the claims patent-eligible." Whether the *DDR* ruling will remain intact through pending Federal Circuit rehearing proceedings or potential Supreme Court scrutiny promises to be a focal point of patent law jurisprudence in 2015.

Dietgoal Innovations v. Chipotle Mexican Grill (E.D. Tex.)

District court decisions in *Dietgoal Innovation* litigation offer insights into how the *Mayo/Myriad/Alice* case holdings are being applied to invalidate food processing patents. U.S. Patent No. 6,585,516 ("the '516 patent") is entitled a "Method and System for Computerized Visual Behavior Analysis, Training, and Planning." All of the '516 patent claims relate to systems and methods for computerized meal planning. Claim 1 covers:

- 1. A system of computerized meal planning, comprising:
 - a User Interface;
 - a Database of food objects organizable into meals; and

at least one Picture Menus [sic], which displays on the User Interface meals from the Database that a user can select from to meet customized eating goal [sic].

"The invention recited in claim 1 is thus a computerized system that has a user interface (e.g., a display screen) and contains (1) a database of food objects that can be organized into meals and (2) one or more picture menus that display meals from the database from which a user can select to meet a customized eating goal. At its most basic level, that claim would be satisfied by a computer screen that could display either a hamburger or a chicken sandwich from which the customer could select in order to satisfy a customized eating goal. The term 'customized eating goals' has been construed to mean 'computer implemented, user-specific dietary objectives.'" *Dietgoal* slip op. at 4.

The precise legal issue presented in the *Dietgoal Innovation v. Chipotle Mexican Grill* case is whether collateral estoppel applies. In the *Bravo Media* case, another federal district court had already invalidated Dietgoals's '516 patent based on the following reasoning:

"Here, the '516 Patent claims a computerized method of selecting meals that align with the user's individual preferences and nutritional goals (for example, by planning out dinners for the week that accord with a low-calorie diet) and calculating the dietary impact of the addition or subtraction of certain foods (for example, by determining how many calories you will save by swapping out French fries for broccoli). These are conventional and quotidian tasks. A person can perform them without the aid of any particular or structured method and without the need of any technology. Indeed, dieters planning their meals and calculating their daily caloric intake make such determinations regularly, whether acting systematically or intuitively. So too do parents planning meals for their children, so as to meet health or nutritional goals. The '516 Patent does not recite any specialized formula or method for implementing the 'well known' process of meal planning; at most, it merely 'provides a new and presumably better method' for calculating and visualizing the dietary impact of certain food choices." *Dietgoal Innovations v. Bravo Media* (S.D.N.Y. slip op. dated July 8, 2014).

The judge authoring the *Chipotle Mexican Grill* opinion is none other than Federal Circuit Judge William C. Bryson. He presided over the E. D. Texas case by designation. He agreed with the New York court's *Bravo Media* invalidity decision and determined it had a collateral estoppel effect.

Practice Takeaway

There is no presumption of patent eligibility. A significant number of patents issued in the 1990s and early 2000s simply recite a generic computer as the means for implementing a software or business method invention. Were those patent applications submitted today, they would not satisfy the USPTO's "Interim Guidance on Patent Subject Matter Eligibility." *Unless* the underlying system or method is novel and nonobvious — separate and apart from its implementation using a generic computing device — such food processing patent claims may not withstand an early dismissal motion. The best way to preserve the patent eligibility of computerized or Internet-based food processing methods or systems is to demonstrate how the innovation makes food processing more efficient or optimal in ways not practiced or foreseen before the advent of computers and the World Wide Web.



Paul Swanson is Chair of Lane Powell's Food, Beverage and Hospitality Practice Group. Paul's practice is devoted to litigating patent, trademark, copyright, unfair competition, software development and trade secret law disputes. Through his representation of various agribusinesses, Paul has litigated a number of cutting-edge issues arising in the field of plant patent and trademark law. Cases he has worked on have helped shape and highlight the legal issues in this expanding area of law, as more and more companies seek

patent and trademark protection for what were once deemed to be undifferentiated commodity food products. Paul can be reached at 206.223.7391, or at swansonp@lanepowell.com.

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