

Alice Rejections Now Flow From Different Part Of USPTO

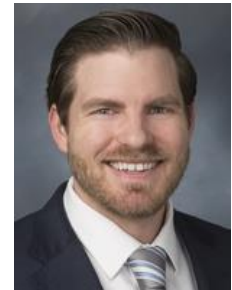
By **Kate Gaudry and Samuel Hayim** (December 4, 2018)

A concise set of statutes dictate the characteristics that a patent application must have to be allowed to grant as a patent. Patent examiners are tasked with reviewing individual applications to determine whether these requirements are met. For example, was the claimed invention new and would it have been nonobvious? And is the claimed invention eligible for patent protection? As is often the situation in law, the devil is in the details when evaluating these deceptively simple patentability standards. Thus, examiners are to use thousands of regulations and court cases to understand how to assess particular and unique applications in view of the requirements.



Kate Gaudry

The patent-eligibility requirement (set forth in 35 U.S.C. § 101) has recently garnered much attention. It has long been established that inventions that are no more than an abstract idea do not meet this requirement.[1] While the Federal Circuit has attempted to establish rather clear tests for determining whether a claimed invention is abstract, the U.S. Supreme Court has resisted such approaches.[2]. In 2014, the Supreme Court again weighed in on the issue in *Alice Corp. v. CLS Bank International*,[3] holding that claims focused on an electronic escrow service were not substantially more than an abstract idea and that mere implementation of an abstract idea on a computer system was insufficient to find the claims patent-eligible.



Samuel Hayim

Examination at the U.S. Patent and Trademark Office changed quickly after *Alice*. Allowance rates plummeted, and patent-eligibility rejections skyrocketed.[4] However, curiously, these effects were largely contained within a particular segment of the hundreds of examining units (known as art units).[5] Specifically, the trends were selectively observable across “business method” art units (art units 3621-29 and 3681-97). Business-method applications typically focus on software innovations, but they span a wide range of technologies (e.g., cryptography, anti-counterfeiting, fraud detection, medical software and electronic voting). Examination statistics corresponding to other computer-related and/or software-related art units (e.g., in the art units in Technology Center 2100, which is focused on “Computer Architecture and Software”) were nearly the same before and after *Alice*. Examples of technologies in Technology Center 2100 includes error and fault detection, generic control systems, artificial intelligence, structural design and modeling, and arithmetic processing and calculating.

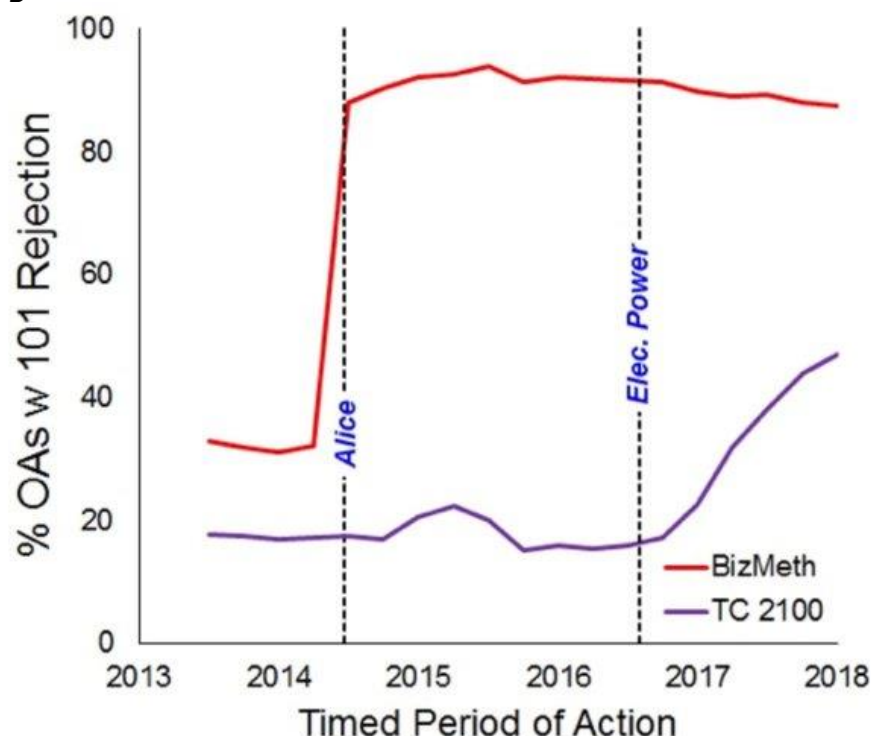
So why were patent applications for the business-method technologies seemingly selectively facing harsher examination? Entities may (and often do) debate how high (or low) the bar should be for securing a patent and how patent requirements should be applied (e.g., how to assess the patent-eligibility requirement). However, consistency in the application of patent law across examiners should be generally desirable. Thus, perhaps examination in Technology Center 2100 should have changed more after *Alice*, or perhaps changes in the examination of business-method applications changed too dramatically, or perhaps applications assigned to Technology Center 2100 were substantially and substantively different in technological focus relative to business-method applications (thereby warranting differential examination responses to *Alice*).

To continue to track examination patterns, we updated our previous analysis to determine whether the examination discrepancy between the business-method art units and Technology Center 2100 remained. Specifically, we used data from LexisNexis

PatentAdvisorSM to associate each action issued by the USPTO between the third quarter of 2013 and the first quarter of 2018[6] to indicate: whether the action was an allowance or office action; whether the action included a rejection under 35 U.S.C. § 101, the art unit, and the date on which the action was issued. We then separated the actions based on calendar-year quarter. For each quarter, we aggregated data across the business-method art units and separately aggregated data across Technology Center 2100. We then calculated time-series statistics for each of the two data groups.

Figure 1 shows the percentage of office actions issued within the identified time periods that included a patent-eligibility rejection (under 35 U.S.C. § 101). The red lines represent data corresponding to the business-method art units. In these art units, the prevalence of patent-eligibility rejections skyrocketed after Alice (represented by the first vertical line).

Figure 1



This post-Alice examination shift was not mirrored in the data for Technology Center 2100. Rather, the eligibility-rejection rates were similar before and after the Alice decision. However, recently, eligibility rejections have become more common in Technology Center 2100.

Astute readers will recognize that this change in eligibility-rejection issuance roughly coincides with a Federal Circuit decision pertaining to patent eligibility: *Electric Power Group v. Alstom*. [7] In this decision, it was held that the claims were focused on collecting information, analyzing the information, and displaying results of the collection and analysis. The court held that this focus was abstract, the claims failed to amount to significantly more, and the claims were patent ineligible. The decision was issued on Aug. 1, 2016, and is represented by the right vertical lines in Figure 1.

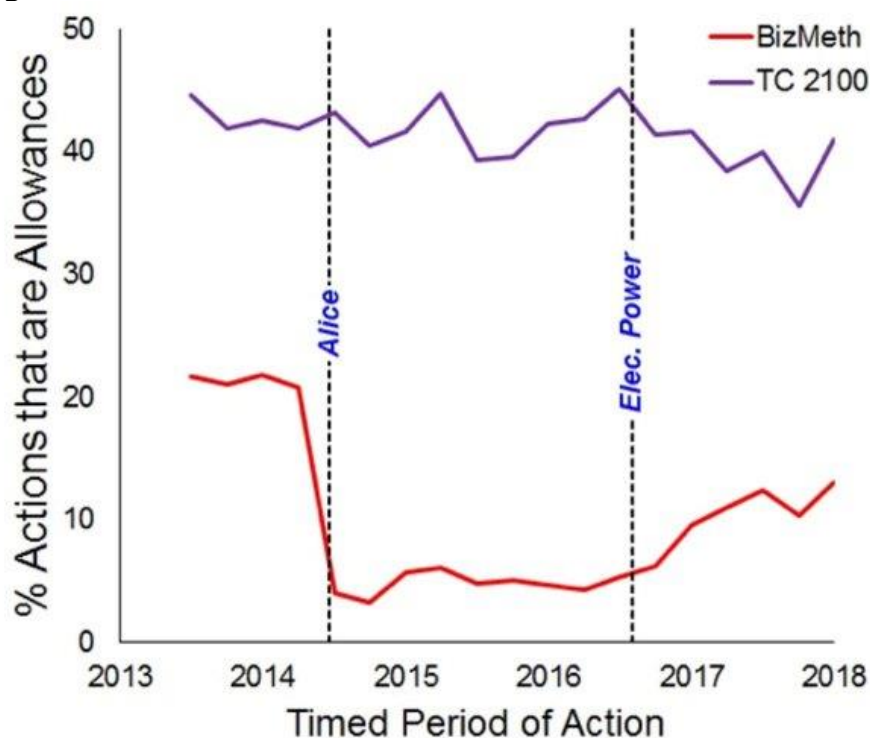
Why did *Electric Power Group* seem to affect examination in Technology Center 2100, while *Alice* did not? The patents at issue in the two cases may offer a clue. In *Alice*, the patents at issue were U.S. Patent Numbers: 5,970,479; 6,912,510; 7,149,720 and 7,725,375, which had been assigned to art units 2765[8], 3624, 3624 and 3693, respectively. Thus, all four patents had been examined in a business-method art unit. Meanwhile, in *Electric Power*

Group, the patents at issue were 7,233,843; 8,060,259 and 8,401,710, which had been assigned to art units 2125, 2121 and 2121, respectively. These art units are in the 2120 art unit group, which is named the “AI & Simulation/Modeling” art unit group.[9]

That is, multiple business-method patents were held to be ineligible for patent protection in Alice, and the USPTO seemingly responded by training examiners in the business-method art units to adjust their examination techniques with respect to assessing eligibility. Then, years later, multiple patents from Technology Center 2100 were held to be ineligible for patent protection Electric Power Group, and the USPTO seemingly responded by training examiners in this technology center to adjust their examination techniques with respect to assessing eligibility.[10]

Our previous studies of business-method examination trends indicated that not only were patent-eligibility rejections becoming more common, but allowances were also becoming more rare. (See the red line in Figure 2.) Interestingly, this allowance-rate change did not coincide with the eligibility uptick for Technology Center 2100. (See the purple line in Figure 2.)

Figure 2



However, if we zoom in to look at specific art units, allowance rates before and after Electric Power Group were substantially different for a subset of the Technology Center 2100 art units. For example, the table below compares the percentage of actions being issued by the USPTO that were allowances between the second quarter of 2016 (before Electric Power Group) and the fourth quarter of 2017 (after Electric Power Group). This comparison was performed at the art unit group level. As shown below, the allowance prevalence was substantial for some art unit groups — one of which is the 2120s art unit group. (This is consistent with our recent study[11] reporting a recent dramatic decrease in allowance rates for the artificial-intelligence technology class 706, which corresponds to art units in the 2120 art unit group.) Recall that the three patents at issue in Electric Power Group were assigned to art units with the 2120s art unit group.

	Q2 2016	Q4 2017
2110s	38.0%	31.2%
2120s	31.9%	22.6%
2130s	32.0%	34.2%
2140s	17.3%	18.3%
2150s	25.6%	20.7%
2160s	28.0%	22.2%
2170s	20.1%	20.1%
2180s	37.2%	34.9%
2190s	34.1%	35.1%

Thus, it appears as though the USPTO is taking careful note of the specific patent-classification context of the case law. Is that wise? How law is to be applied depends on the particular facts and circumstances at hand. In patent law, those particular facts are integrally intertwined with the technical innovation set forth in the patent application. Thus, whether an analysis set forth by a court should affect how a given patent application is examined will often have some dependence on a degree to which a type of technology at focus in a case corresponds to a type of technology set forth in the patent application.

The USPTO has already gone through extensive effort to develop a scheme for clustering applications that relate to similar types of technology into individual art units. The USPTO and applicants then have the benefit of having examiners with corresponding technical specializations examining the applications. Capitalizing on this art-unit structure to rapidly respond to new case law with targeted examination training provides efficiency and speed advantages.

However, art-unit classification is far from a precise science. Some art units correspond to a broad swath of technologies, and some art units in different technology centers relate to very similar technologies. Businesses prosper and the public benefits when government agencies act consistently and predictably. Thus, art units of patents at issue in court cases may provide a good starting point when identifying which examiners to train on new examination techniques. But it is important that a higher-level assessment also be conducted, such that training is not performed in piecemeal and such that patent examination improves in its predictability and consistency.

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[1] *Gottschalk v. Benson* , 409 U.S. 63 (1972).

[2] *Bilski v. Kappos* , 561 U.S. 593 (2010).

[3] *Alice Corp. v. CLS Bank Int'l* , 573 U.S. ____ (2014).

[4] Gaudry KS. "Post-Alice: Allowances are a rare sighting in business-method art units"

IPWatchDog. 2014, available at: <http://www.ipwatchdog.com/2014/12/16/post-alice-allowances-rare-in-business-method/id=52675/>.

[5] Id.

[6] The end of this date range was selected to ensure that the data set nearly completely represented the patent-office actions from the time window. PTO delays in availing data and further processing delays result in more recent time windows corresponding to less complete data sets.

[7] Electric Power Group, LLC v. Alstom S.A.  (Fed. Cir. August 1, 2016).

[8] A retired business-method art unit.

[9] USPTO. TC 2100 Management Roster. <https://www.uspto.gov/patent/contact-patents/tc-2100-management-roster>.

[10] Notably, a small and temporary uptick in patent-eligibility rejections was also observed in late 2014 and early 2015. This uptick followed the decision of DDR Holdings, LLC v. Hotels.com, L.P. , 773 F.3d 1245 (Fed. Cir. 2014), in which two Technology Center 2100 patents and one Technology Center 2400 patent were held to be patent eligible. We suspect that the USPTO trained examiners in Technology Center 2100 after both DDR and Electric Power Group, but that the sizable difference in the magnitude of eligibility-rejection effects following the decision is due to the opposite eligibility holdings (and different substances of post-decision training).

[11] Gaudry K, Hayim S. "Artificial Intelligence Technologies Facing Heavy Scrutiny at the USPTO" IPWatchdog, 2018, available at <http://www.ipwatchdog.com/2018/11/28/artificial-intelligence-technologies-facing-heavy-scrutiny-uspto/id=103762/>.