

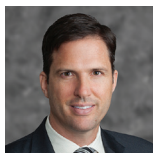


## The IP Beacon® The Intellectual Property Law Newsletter of Haynes and Boone, LLP

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### The Few, The Proud, The Patent-Eligible Software Claims

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It is no secret that it is difficult for software technology patent claims to be deemed subject matter eligible under 35 U.S.C. § 101 on appeal, as only a handful of cases involving software technology have passed § 101 scrutiny by the Federal Circuit since the Supreme Court's decision in *Alice v. CLS Bank*<sup>1</sup>: Until recently, there have been only three such cases: *DDR Holdings, LLC v. Hotels.com, L.P.*,<sup>2</sup> *Enfish LLC v. Microsoft Corp.*,<sup>3</sup> and *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*.<sup>4</sup> However, now a fourth case may be added to those ranks. On September 13, 2016, the Federal Circuit decided *McRO, Inc. v. Bandai Namco Games America Inc.*,<sup>5</sup> ruling that claims directed to automating part of a preexisting 3-D animation method were patent-eligible under § 101. Below is a review of the *McRO* case facts, the legal reasoning of the Federal Circuit in reaching its conclusion, and some new practical takeaways for claim drafting and prosecution before the U.S. Patent Office.

### The Background of *McRO*

The *McRO* case reached the Federal Circuit on an appeal from a judgment by the Central District of California holding the claims of U.S. Patent Nos. 6,307,576 and 6,611,278 invalid under § 101.<sup>6</sup>

The patents at issue describe the automation of part of a preexisting 3-D animation method that involved manipulating the facial expressions of a 3-D character when that 3-D character makes certain sounds ("phonemes") while speaking.<sup>7</sup> In the pre-existing 3-D animation method, a human animator was required to select "morph weights" between a "neutral model" (i.e., a resting, neutral facial expression) and a "morph target" (a facial expression associated with making a certain sound) to provide a desired facial expression when the 3-D character was making a certain sound while speaking.<sup>8</sup> Morph weights were manually set at particular times ("keyframes") when the 3-D character was identified as making a particular sound using a timed transcript of the 3-D character speaking, and a computer program

<sup>1</sup> 134 S. Ct. 2347 (2014).

<sup>2</sup> 773 F. 3d 1245 (Fed. Cir. 2014).

<sup>3</sup> Appeal No. 2015-1244 (Fed. Cir. 2016).

<sup>4</sup> Appeal No. 2015-1763 (Fed. Cir. 2016).

<sup>5</sup> Appeal No. 2015-1080 (Fed. Cir. 2016). The oral arguments occurred in December 2015.

<sup>6</sup> *McRO*, Appeal No. 2015-1080, slip op. at pp. 4, 13-15.

<sup>7</sup> See *id.* at pp. 4-5.

<sup>8</sup> See *id.* at pp. 7-8.

would then interpolate between the keyframes to cause the facial expressions of the 3-D character to morph between the keyframes.<sup>9</sup> The patents claim a process that automates this pre-existing 3-D animation method by determining when to set morph weights for keyframes, and setting those morph weights for the keyframes, using rules that are applied to the timed transcript and that take into consideration the differences in mouth positions for similar sounds based on context.<sup>10</sup>

Those rules are described in the patents as providing for the automation of the process of creating realistic transitions between silence and speaking, since in the pre-existing 3-D animation method such silence-to-speaking transitions were associated with the 3-D character gradually opening its mouth when it was supposed to be in the process of making a particular sound, and required animators to subjectively identify the problematic sequence, manually fix it by adding an appropriate keyframe, and manually determine appropriate morph weights to make the silence-to-speaking transition more realistic.<sup>11</sup> In the claimed approach, the rules automate this process by effectively creating a keyframe prior to the 3-D character beginning to speak after a silence, which causes the 3-D character to open its mouth prior to speaking to obtain the realistic transition into speech.<sup>12</sup>

While the District Court appeared torn on the subject matter eligibility of the patent claims, stating that “[f]acially, these claims do not seem directed to an abstract idea. They are tangible, each covering an approach to automated three-dimensional computer animation, which is a specific technological process,”<sup>13</sup> it ultimately concluded that “the claim adds to the prior art...the use of rules, rather than artists, to set the morph weights and transitions between phonemes,”<sup>14</sup> and held that novel portions of the invention were “too broadly preemptive to satisfy § 101”<sup>15</sup> because they were “not limited to specific rules, but rather ‘purport to cover all such rules’” such that they “preempt the field of such lip synchronization using a rules-based morph target approach.”<sup>16</sup>

### The Federal Circuit’s Reasoning

In overturning the ruling by the District Court, the Federal Circuit disagreed with the District Court’s

determination that the claims of the patents were directed to the abstract idea of “automated rules-based use of morph targets and delta sets for lip-synchronized three-dimensional animation,”<sup>17</sup> pointing to its previous warnings to the lower courts against oversimplifying claims by looking at them generally and failing to account for their specific requirements.<sup>18</sup> Instead, the Federal Circuit felt that the claims were “limited to rules with specific characteristics...in that they define morph weight sets as a function of the timing of phoneme sub-sequences.”<sup>19</sup>

In explaining that argument, the Federal Circuit noted that “processes that automate tasks that humans are capable of performing are patent-eligible if properly claimed” by pointing out the Defendants’ failure to dispute that point,<sup>20</sup> and refuted the District Court finding that the claims improperly purported to cover all rules by finding that the claims here were properly claimed and “limited to rules with certain common characteristics, i.e., a genus,” noting that “[c]laims to the genus of an invention, rather than a particular species, have long been acknowledged as patentable.”<sup>21</sup>

The Federal Circuit then proceeded to perform a preemption analysis in light of the preemption findings by the District Court,<sup>22</sup> which the Federal Circuit framed as a determination of “whether the claims in these patents focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery.”<sup>23</sup>

<sup>9</sup> See *id.* at pp. 7-9.

<sup>10</sup> *Id.* at pp. 9-10.

<sup>11</sup> *McRO*, Appeal No. 2015-1080, slip op. at p. 10.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* at p. 13.

<sup>14</sup> *Id.* at p. 14.

<sup>15</sup> *Id.*

<sup>16</sup> *McRO*, Appeal No. 2015-1080, slip op. at p. 14.

<sup>17</sup> *Id.* at p. 21.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.* at p. 22.

<sup>20</sup> *Id.* at p. 22.

<sup>21</sup> *McRO*, Appeal No. 2015-1080, slip op. at p. 22.

<sup>22</sup> See *id.* at p. 14.

<sup>23</sup> *Id.* at p. 23.

In that preemption analysis, the Federal Circuit disagreed that the claims simply used a computer as a tool to automate conventional activities, arguing that there was “no evidence that the process previously used by animators is the same as the process required by the claims,”<sup>24</sup> and “[t]here has been no showing that any rules-based lip-synchronization process must use rules with the specifically claimed characteristics.”<sup>25</sup> Rather, the Federal Circuit noted the Defendants’ concession that the pre-existing animation method “was driven by subjective determinations rather than specific, limited mathematical rules,”<sup>26</sup> and argued that the computer in the claimed process was “employed to perform a distinct process to automate a task previously performed by humans.”<sup>27</sup>

Of particular importance to the Federal Circuit was the fact that, in the pre-existing animation method, “animators would initially set keyframes at the point a phoneme was pronounced to represent the corresponding morph target as a starting point for further fine tuning...This activity, even if automated by rules, would not be within the scope of the claims because it does not evaluate sub-sequences, generate transition parameters or apply transition parameters to create a final morph weight set,”<sup>28</sup> and “there are many other possible approaches to automating lip synchronization using rules.”<sup>29</sup> The Federal Circuit then concluded that “the structure of the limited rules reflects a specific implementation not demonstrated as that which ‘any [animator] engaged in the search for [an automation process] would likely have utilized,”<sup>30</sup> and “[i]t is the incorporation of the claimed rules, not the use of the computer, that ‘improved [the] existing technological process’ by allowing the automation of further tasks,”<sup>31</sup> distinguishing *Flook*, *Bilski*, and *Alice* “where the claimed computer-automated process and the prior method were carried out in the same way.”<sup>32</sup>

### Takeaways for U.S. Prosecution

The above analysis by the Federal Circuit, and attending resultant holding, provides practical takeaways for drafting claims and prosecuting them at the USPTO. As a threshold matter, this is another case like *Enfish* that reiterates that step one of the *Alice* analysis has purpose, and cannot merely be glossed over by the USPTO.

During prosecution, practitioners should continue to argue the Examiner’s conclusion that the claims are directed to an abstract idea fails to “account for the specific requirements of the claims” and instead looks at them only generally where applicable. While this provides a relatively strong position, as many Examiners tend to generalize a broad concept from the claims and immediately follow that with a comparison to one of the concepts identified as abstract from court decisions, as a matter of practical reality it is doubtful Examiners will give any meaningful thought to this argument. However, it can provide a legal basis (on the *Enfish* and *McRO* line of cases) for appeal with a clear record, and thus is still a worthy exercise.

Another takeaway from this decision may be applied in situations where the claims are only rejected under § 101 (i.e., no art rejections under §§ 102 or 103). Typically, when applicants have argued against these “101-only” rejections by pointing to an admitted lack of teaching in the prior art (e.g., that there is “significantly more” under step two as identified by the absence of an art rejection), the Examiner has rebutted with argument that the requirements of § 101 and § 103 are different without really identifying or justifying how. Using the Federal Circuit’s reasoning in *McRO*, applicants may look at whether they have an analogous argument that their claimed process is carried out in a different way than that in the prior art and, if so, may point to the Federal Circuit’s argument in *McRO* that “Defendants provided no evidence that the process previously used by animators is the same as the process required by the claims ... This is unlike *Flook*, *Bilski*, and *Alice*, where the claimed computer-automated process and the prior method were carried out in the same way.”<sup>33</sup>

<sup>24</sup> *Id.* at p. 24.

<sup>25</sup> *Id.* at p. 26.

<sup>26</sup> *McRO*, Appeal No. 2015-1080, slip op. at p. 24.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

<sup>29</sup> *Id.* at p. 26.

<sup>30</sup> *Id.* at p. 27.

<sup>31</sup> *McRO*, Appeal No. 2015-1080, slip op. at p. 24.

<sup>32</sup> *Id.* at pp. 24-25.

<sup>33</sup> *Id.*

The Federal Circuit's reasoning in *McRO* also lends itself to an argument during prosecution that reminds the Examiner that a claim is not *per se* abstract merely because rules are involved or human tasks are automated. As such, claims directed to automating human tasks may be argued as not being *per se* abstract because they have been "properly claimed" as in *McRO*.

Finally, the doctrine of preemption still has teeth. Though the Patent Office has downplayed the role preemption plays in the § 101 analysis (e.g., stating in the 2015 July Update that "questions of preemption are inherent in the two-part framework from *Alice Corp.* and *Mayo*," although in practice Examiners rarely address preemption in Office Actions), *McRO* focused a notable portion of its analysis on this point.<sup>34</sup> The Office typically responds to arguments regarding preemption with the conclusory assertion that "the absence of complete preemption does not guarantee that a claim is eligible."<sup>35</sup> In rebuttal, applicants may rely on *McRO*'s approach of looking at a "narrower concern" in the absence of complete preemption and may analogously argue that their claims do not preempt all techniques for accomplishing a desired result, pointing to the Federal Circuit finding there were many other "alternative rules-based methods of animating lip synchronization and facial expressions of three-dimensional characters ..." to the process claimed in *McRO*.

## Conclusion

The decision in *McRO* again demonstrates that the first step in the *Alice* test is not a mere formality, and further emphasizes the need to avoid oversimplifying the claims when alleging an abstract idea by failing to account for specific requirements in the claims. Even where claims appear to incorporate "classic" abstract idea concepts (i.e., rules, human activity, etc.), the *McRO* decision emphasizes that step one must still include a full analysis of the claims by taking into account any specific requirements of those claims, and particularly whether those specific requirements are different from the art in achieving a result.

This is but one addition to a small (but hopefully growing) stable of decisions demonstrating that it is not a bygone conclusion that most claims in the

software arts are unpatentable under § 101. The road ahead is still a long one for those attempting to overcome § 101 in certain art units in the USPTO and in litigation, but this decision adds another glimmer of hope and support for arguments directed to the subject matter eligibility of software technology: *McRO* again reminds defendants, and the USPTO, that they must do their work in adequately proving both steps of the *Alice* test, and applicants/patent owners should hold them to that.

<sup>34</sup> See, e.g., *id.* at pp. 23-27.

<sup>35</sup> See July 2015 Update: Subject Matter Eligibility, p. 8

<sup>36</sup> *McRO*, Appeal No. 2015-1080, slip op. at pp. 26-27.

## Five Things Inventors May Not Realize About the Patent Process

Daniel Tsai



Daniel Tsai

Whether you are a garage tinkerer or an engineer at a technology company, you probably have considered obtaining a patent to protect one of your ideas or innovations. There is an allure to a government issued document declaring that you are the inventor of a patent that grants you exclusive right to your innovation. However, the next time

that light bulb goes off above your head, here are five things you should consider before calling your patent lawyer.

### 1. There Is A Long Line At The Patent Office

In 2015, a total of 411,728 new patent applications were filed at the United States Patent and Trademark Office (USPTO), and this number has increased every year for the past five years. Even though the USPTO has tens of thousands of patent examiners examining these patent applications, there simply are not enough examiners to keep up with such a large volume of patent applications resulting in a relatively long backlog of pending applications waiting for

review and examination. Typically, after a new patent application is filed, it takes about one to two years for that application to finally be reviewed and examined by an examiner, and another year or two may pass while the patent application goes through several rounds of Office Actions and responses between the patent examiner and your patent lawyer. By the time the patent application is allowed and issued as a patent, three to four years (or longer) may have passed since it was initially filed. This lag time means that you may have already won a Nobel prize for your invention before the USPTO issues a patent for it.

The USPTO does provide a few options to speed up the patenting process by filing a petition to make special based on special circumstances, such as age or health. For example, an inventor who is 65 years old or older can file a petition to make special based on age, which would move his/her patent application to the front of the line. For those who do not have special circumstances but simply prefer not to wait in line, the USPTO provides several programs or options, such as the Track One Prioritized Examination, that allow applicants to pay a fee to have their applications move up to the front of the line at the USPTO. Based on your unique circumstance, an experienced patent lawyer can explore different options with you to speed up the patenting process.

## 2. You Don't Usually End Up With A Patent For The Invention You Initially Started With

Whether you realize it or not, in many cases others may already have come up with ideas similar to your invention. When examining a patent application, the patent examiner at the USPTO will search through various databases and typically find prior art that describes concepts similar to your ideas and will reject your patent application for lack of novelty or for being obvious in view of the prior art. To help you obtain a patent, your patent lawyer will attempt to overcome these rejections by providing arguments and/or amending the patent application to distinguish your idea from the prior art.

Typically, your patent application will go through several rounds of rejections and amendments before the patent application is finally allowed (assuming the patent application survives the rejections). As such, what you initially claimed (or intended to claim) in

your patent application may be different from what is eventually allowed. Some may be surprised to find that a patent application for a dream machine ends up with final claims for a bizarre widget.

To mitigate such surprises, you may wish for your patent lawyer to conduct a prior art search before filing a patent application. A prior art search can give you an idea on whether there are prior arts similar to your invention. Based on the result of the prior art search, an experienced patent lawyer can provide you with an analysis on how much protection you can realistically expect to obtain from filing a patent application. Typically, patent protection in a more crowded technology area tends to be narrower and is harder to obtain. In that case, you may wish to invest your patenting effort in another innovation instead.

## 3. Having A Patent Does Not Necessarily Protect You From Patent Lawsuits

A patent gives you **the right to exclude others** from making, using, or selling the patented technology. However, a patent does **not** necessarily give you the right to make, use, or sell the patented technology. For example, having a patent on a widget you have invented provides no assurance that you will not be sued by another person if that person believes your widget infringes on his/her patent. This may be a confusing concept to most people. It may be helpful to imagine that a patent is a sword, but not a shield. Thus, having a patent on your widget does not shield you from patent lawsuits, as someone else may already have obtained patent(s) that arguably cover some aspects of your widget. What is a patent good for then? Again, a patent can be used as a sword to prevent others from making, using, or selling your patented technology. Further, in the event that you are named in a patent lawsuit, having a well-drafted patent will put you in a better negotiating position for cross licensing.

## 4. You have To Pay More Fees After Patent Grant To Keep The Patent In Force

After waiting several years and paying tens of thousands of dollars to the USPTO and your patent lawyer, you finally receive a patent and hope that the patent will stop costing more money. Unfortunately, to keep the patent in force, you have to pay maintenance fees at 3.5 years, 7.5 years, and 11.5 years after issuance



of the patent. For example, for a large entity applicant, the maintenance fees are \$1,600.00 due at 3.5 years, \$3,600.00 due at 7.5 years, and \$7,400.00 due at 11.5 years. Although there is a 50 percent or 75 percent discount for individual inventors or small organizations, these maintenance fees can still add up when you have to keep multiple patents in force. Thus, you or your patent lawyer should periodically review your patent portfolio and consider carefully whether some patents should be allowed to lapse to reduce the cost of maintenance fees. For example, based on business circumstances or market conditions, you may wish to allow certain patents that no longer provide value or protection to lapse.

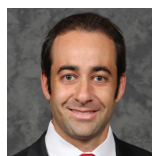
### 5. After Your Patent Expires, Your Patent Right Is Automatically Given To The Public

The goal of the U.S. patent system is to promote the progress of innovation. As Isaac Newton once said “If I have seen further, it is by standing on the shoulders of giants.” To that end, the patent system encourages an inventor to share his/her invention with the general public through the filing of patent application. In return, the inventor is rewarded with monopoly over his/her invention for a limited period of time. A utility patent will generally expire approximately 20 years after filing, and following expiration the invention becomes public domain and anyone can make, use, or sell the invention. Thus, if you want to keep the exclusive right to your innovative idea for longer, you should consider other means of protection. For example, trade secret protection is one option that allows an idea to be protected for as long as it is kept a secret from the public. Famous examples of trade secret include the formula for Coca, ingredients for KFC’s fried chicken, and the formula for WD-40.

The patent system is one of the most powerful tools for protecting innovation. Technology companies have risen and fallen based on a little piece of paper called patent. However, there is no one-size-fits-all solution when it comes to protecting your intellectual property. Given the substantial costs and time associated with obtaining a patent, you should discuss and consider all options with an experienced patent lawyer on how to best protect your innovation.

## Changes Coming to Trademark Trial and Appeal Board Rules of Practice

Michael Goodman\* and Jason Whitney



Michael Goodman



Jason Whitney

The United States Patent and Trademark Office has published its first major update to the rules for trademark trials and appeals in nearly a decade.

The final changes to the Trademark Trial and Appeal Board (“TTAB”) Rules of Practice appear in the October 7, 2016 Federal Register (81 Fed. Reg. 69950) and are scheduled to go into effect on January 14, 2017. Unlike substantive rule changes that generally apply only to future proceedings, the procedural TTAB rule changes will apply to all active proceedings as of January 14, 2017, whether pending on or filed after the effective date.

The revisions to the TTAB rules affect many aspects of practice, from the period before oppositions or cancellations are filed through appeals of final TTAB decisions to the United States Court of Appeals for the Federal Circuit.

### THE MANY REVISIONS INCLUDE:

#### ■ Modified Service and Filing Requirements.

- The revised TTAB rules revert to the longstanding, pre-2007 policy of having the TTAB, rather than the opposer or petitioner, serve notices of opposition and cancellation. The comments accompanying the rule change state that the TTAB intends to serve cancellation notices by U.S. mail “pending system enhancements to facilitate email service.” 81 Fed. Reg. 69953. The TTAB will send opposition notices by email if an authorized email address has been provided. *Id.*
- The revised rules also adopt an across-the-board requirement for electronic filing and service on other parties. Thus, absent technical problems or extraordinary circumstances, documents must be filed with the TTAB through

the Electronic System for Trademark Trials and Appeals. Similarly, email service on other parties is required unless otherwise agreed, with exceptions for technical problems or extraordinary circumstances.

#### ■ Limitations on Discovery.

- While the TTAB rules have long restricted the number of interrogatories a party may serve to 75, no such limits applied to requests for production or admission. But no longer: the new rules impose the same 75 number limit on requests for production and admission, which will force parties to carefully consider when and how many requests for production and admission to serve (including whether to serve additional discovery before the limit takes effect).
- The revised TTAB rules also curtail the period for serving discovery and the parties' ability to agree to discovery extensions. Under the new rules, discovery requests cannot be served up to the close of discovery, but must be served so that responses will be due on or before the close of discovery. Likewise, the parties can no longer agree to extensions that move discovery response deadlines past the close of discovery.

#### ■ New Rules and Requirements.

- The changes to the TTAB procedures incorporate a number of new rules and requirements. Among these is a rule permitting the TTAB to unilaterally disclose, without prior notice, confidential-designated material that the TTAB concludes "cannot reasonably be considered confidential," even if all parties agree that the material is confidential. While the comments accompanying the rule indicate that such disclosures will be "narrowly applied and only done when necessary to articulate the Board decision," 81 Fed. Reg. 69959, this limitation does not appear in the rule itself, leaving the door open to broader application.
- The revised TTAB rules additionally require cancellation petitions to identify "to the best of petitioner's knowledge" the name, address, and email address of respondent.

Given the significant number of revisions to the TTAB rules, both large and small, parties and practitioners will find the TTAB Rule Changes Summary useful in understanding and preparing for the changes taking effect on January 14, 2017.

## SUMMARY OF KEY CHANGES<sup>1</sup> TO TTAB RULES (EFFECTIVE JANUARY 14, 2017)

Rule	Old Rule(s)	New Rule(s)
Service of notices of opposition or cancellation.	Petitioner required to serve. §§ 2.101, 2.111.	TTAB will serve.  For oppositions, TTAB will serve by email to authorized addresses. § 2.105.  For cancellations, TTAB will serve by U.S. mail pending enhancements to system to permit service by email. § 2.113.
Service of concurrent use application.	Applicant required to serve. § 2.99(d)(1).	TTAB will serve (by email if provided). § 2.99(c),(d).
Filing through Electronic System for Trademark Trials and Appeals (“ESTTA”).	Optional, except for mandatory ESTTA filing of certain papers relating to Section 66(a) applications. §§ 2.101(b), 2.102(a).	Mandatory, but paper filing may be allowed upon petition for ESTTA technical problems or extraordinary circumstances. E.g., §§ 2.101(b), 2.102(a), 2.106(b), 2.111(c), 2.114(b), 2.121(d), 2.123(f)(2), 2.126.  <u>Note:</u> oppositions or extensions to oppose Section 66(a) applications must always be filed electronically.
Notification of other proceedings.	n/a	Applicant or respondent must “promptly inform” TTAB of another proceeding between the same parties or anyone in privity. §§ 2.106(b)(3)(i); 2.114(b)(3).
Identification of respondent contact information in cancellation petition.	n/a	Cancellation petition must identify “to the best of petitioner’s knowledge” the name, address, and email address of respondent. § 2.112(a). No requirement to identify respondent’s attorney.
Disclosure of confidential designated information by TTAB.	n/a	“The Board may treat as not confidential that material which cannot reasonably be considered confidential, notwithstanding a designation as such by a party.” § 2.116(g).
Service of papers by email. § 2.119(b).	Only if agreed to by parties.	Email service mandatory, unless (i) otherwise agreed by parties or (ii) email service cannot occur due to technical problems or extraordinary circumstances.
Additional time for certain types of service. § 2.119(c).	5 days added to response periods if service by first-class mail, Priority Mail Express, or overnight courier.	No additional days, regardless of manner of service. Time to respond begins on date of service.

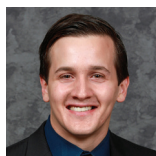


Rule	Old Rule(s)	New Rule(s)
Proportionality in discovery. § 2.120(a)(1).	Applicability of Federal Rule of Civil Procedure 26 includes “scope, timing, and sequence of discovery.”	“Proportionality” added for consistency with amended Federal Rules of Civil Procedure.
Serving discovery. § 2.120(a)(3).	Discovery requests must be served on or before the close of discovery.	Discovery requests must be served so that responses will be due no later than close of discovery.
Extending discovery responses. § 2.120(a)(3).	Parties may agree to extend response periods beyond close of discovery.	Parties may not agree to responses due later than the close of discovery.
Requests for production.	No limit. § 2.120(d).	Limited to 75, and a mechanism for objecting to more is provided. § 2.120(e).
Requests for admission.	No limit. § 2.120(h).	Limited to 75, and a mechanism for objecting to more is provided. § 2.120(i).  Parties may make one comprehensive request for admission to authenticate specific documents from other parties.
Witness testimony.	Witness testimony may be taken by deposition or written questions. § 2.123(a).  Affidavit testimony permitted only if agreed by the parties. § 2.123(b).	Witness testimony may be made by affidavit or declaration (subject to cross-examination), or by deposition or written questions. §§ 2.121(e), 2.123(a).  <u>Note</u> : video testimony is still not allowed.
Cross-examination of affiant or declarant.	n/a	Party electing to cross-examine affiant or declarant must serve and file election notice within 20 days from service of the affidavit or declaration. Cross-examination must be completed within 30 days from the date of service of election notice. §§ 2.123(c).  If cross-examination is by written questions, the questions are served but not filed. § 2.124(d)(1).
Notice of reliance statement of relevance.	Only required for printed publications and official records. § 2.122(e).	All notices must indicate relevance of evidence and associate it with one or more issues. § 2.122(g).
Deadlines for responses and replies to motions (excluding summary judgment motions).	15 days from service. § 2.127(a).	20 days from service. § 2.127(a).

<sup>1</sup> The TTAB rule amendments include additional changes not identified here. See 81 Fed. Reg. 69950 (Oct. 7, 2016).

## The Federal Circuit Reins in the Law of Nature Doctrine

Robert Mazzola\*



Robert Mazzola

A few months ago, the Court of Appeals for the Federal Circuit (CAFC) in *Rapid Litigation Management Ltd. v. CellzDirect, Inc.*, No. 15-1570 (Fed. Cir. July 5, 2016) overturned a lower court's finding of invalidity under the law of nature doctrine of 35 U.S.C. § 101 for a patented process involving re-freezing hepatocytes. The question before

the court was whether the claims of U.S. Patent No. 7,604,929 (the "'929 patent") recited patent eligible subject under 35 U.S.C. § 101 when analyzed using the two-part test articulated in *Alice Corp. v. CLS Bank Int'l*. The CAFC held that the patented process was not "directed to a patent-ineligible law of nature," but rather a "new and improved way of preserving hepatocyte cells for later use." *Id.* at 2 and 9.

Hepatocytes are liver cells that are useful for testing, diagnostics, and treatment, and the relevant technical problem solved by the patent in this case was that the creation of pooled hepatocyte products could only be performed after one freezing cycle. As the court explained, the "[p]revailing wisdom . . . taught that cells could be frozen only once and then had to be used or discarded." The inventors of the '929 patent determined that one could re-freeze the hepatocytes and still have viable cells, and naturally claimed a method "compris[ing]: (A) subjecting previously frozen and thawed cells to density gradient fractionation to separate viable cells from non-viable ones; (B) recovering the viable cells; and (C) refreezing the viable cells."

Under step one of the two-part *Alice* test, the court examined whether this method claim was distinguishable from prior cases involving natural laws and natural relationships in order to determine whether the claim was "directed to one of [the] patent ineligible concepts," such cases including: *Genetic Technologies v. Merial L.L.C.*, 818 F.3d, 1369 (Fed. Cir. 2016), *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371 (Fed. Cir. 2015), *cert. denied*, No. 15-1102, 2016 WL 1117246 (June 27, 2016), and *In re BRCA1- & BRCA2-Based Hereditary Cancer Test Patent Litig.*, 774 F.3d 755, (Fed. Cir. 2014). In *Genetic Technologies*, the CAFC

held that the methods for detecting a coding region of DNA based on the coding region's relationship to non-coding regions amounted to no more than "identifying information about a patient's natural genetic makeup," while in *Ariosa*, the court opined that methods for detecting paternally inherited cffDNA in the blood or serum of a pregnant female exploited the natural phenomenon of the very existence and location of cffDNA being available in the pregnant female, and noted that the claim language in *Ariosa* did no more than identify the presence of the cffDNA itself. Finally, the claims in *In re BRCA* involved comparing two sequences of DNA, one target DNA sequence and one wild-type sequence, to detect alterations; the CAFC held that those claims were directed to a patent-ineligible "abstract mental process" of comparison of the two sequences. According to the court, the common denominator for these cases was that the claims at issue were "directed to" a patent-ineligible concept "when they amounted to nothing more than observing or identifying the ineligible concept itself." *Rapid Lit.*, Appeal No. 15-1570 at 9.

In contrast, the CAFC remarked that the claims involving refreezing the hepatocytes did not merely rely on "observation or detection of the ability of hepatocytes to survive multiple freeze-thaw cycles." *Id.* at 10. Rather, the court reasoned that the patented invention "achieve[d] a better way of preserving the hepatocytes," and was therefore "directed to a new and useful method of preserving hepatocyte cells." *Id.* The court explained that claiming a process by "describ[ing] the natural ability of the subject matter to undergo the process does not make the claim 'directed to' that natural ability," and observed that claims directed to a method of "producing a new compound" could be found ineligible due to "the individual components' ability to combine to form the new compound." *Id.* Consequently, the CAFC determined that the claims of the '929 patent, directed to a "new and improved" "method of producing a desired preparation of multi-cryopreserved hepatocytes" were not directed to a patent ineligible concept. *Rapid Lit.*, Appeal No. 15-1570 at 13 (quoting '929 patent col. 19 l. 66-col. 20 l. 20).

The court's reasoning for step one of the *Alice* test relied on three main points. First, the claims recited a single method, of potentially many others, to produce a desired result. Second, the claim's final step involved "refreezing," as opposed to "observing," "identifying"

or “comparing” (which were the final steps in those cases where the claims were found to be directed to a natural law). Third, the produced result of the method claim was an “improvement” over conventional preparation methods.

The result in *Rapid Litigation* does not appear to help distinguish *Ariosa*, where tests on cffDNA in the maternal bloodstream improved upon previous tests of fetal DNA by “avoid[ing] the risks of widely-used techniques that took samples from the fetus or placenta.” However, the key conceptual difference between the claims in *Rapid Litigation* and *Ariosa* is that cffDNA had been present already in nature; all man had to do was extract the cffDNA from the blood or serum of a pregnant female and inspect it to gain the benefit of the information it contained. The cffDNA did not need to go through any additional treatment such as refreezing in order to be identified. Thus, it was insufficient in *Ariosa* that the resulting process was an improvement because the more easily accessible information was already readily available. Extrapolating this principle more broadly, a discovery that *applying step X will result in Y* may result in a patentable process because it is not directed to a natural law, while a discovery that *looking in a certain place and doing something there to find out something else* may not result in a patentable process because it may be directed to a natural law. In addition, it may be that *step X* must be included as part of a novel combination of steps that has not previously been performed in order for the process to be patent eligible. See *Rapid Lit.*, Appeal No. 15-1570 at 9.

While the court’s determination in *Rapid Litigation* that the claim was not directed to a patent ineligible concept was dispositive, the court proceeded to the second step of the *Alice* test for completeness to determine whether additional elements apart from the patent ineligible concept, considered both individually and as an ordered combination, were significantly more than the ineligible concept itself. The CAFC held that “[e]ven if. . .the ‘929 patent [was] ‘directed to’ hepatocytes’ natural ability to survive multiple freeze-thaw cycles” the claims would be patent-eligible under step two as well. *Rapid Lit.*, Appeal No. 15-1570 at 13. The court stated that a claim that is “directed to” a patent-ineligible concept, while also improving an existing technology process, is sufficient to transform the claim into an inventive application of

the patent-ineligible concept. Addressing the claims at issue, the court observed that “[t]he benefits of the improved process over the prior art methods [were] significant . . . allow[ing] researchers to pool samples together in advance and preserve them for later use, rather than needing to wait until enough single samples are accumulated that can be pooled and used immediately.” *Rapid Lit.*, Appeal No. 15-1570 at 13.

The court noted that the fact that each of the individual steps in a claim were previously known does not defeat patentability of a claim, because previously known steps in combination may result in a patentable process. *Id.* However, it is insufficient to merely “add[] knowledge of the natural law” or “perform[] the same steps on a newly discovered, naturally occurring” composition of matter in order to make a claim patent eligible. *Id.* at 14. The claimed process of preserving hepatocytes by repeating the previously practiced steps was not only an improvement, but the combination was also “far from routine and conventional.” *Id.* at 15. Consequently, it is “sufficient” at step two for a claim to contain significantly more than the ineligible concept itself when the claim is a new combination of steps that results in an improvement over the art. See *Rapid Lit.*, Appeal No. 15-1570 at 13-14.

The CAFC, in holding that the patent claims involving re-freezing hepatocytes recited patentable subject matter, reversed the lower court’s finding of invalidity under 35 U.S.C. § 101. The court found that the claims recited an improved method of preserving hepatocytes as a new combination of steps featuring a final refreezing step rather than merely incorporating a final step of observing, identifying, or comparing some newly discovered, naturally occurring matter, and recited significantly more than hepatocytes’ natural ability to survive multiple freeze-thaw cycles because the method was not merely routine and conventional and resulted in an improvement over the prior art. This decision gives patent drafters or prosecutors another basis to argue subject matter eligibility when the limitations of the claim form a new combination that solves a technological problem and when the result of practicing the method is an improvement to that technology.

## Audi, Others Can't Escape IP Suit Over Fuel Use Technology



James Shimota



Howard Levin



Aaron Taggart

An Illinois federal judge ruled Wednesday that Audi, Chrysler and Mercedes-Benz must face allegations brought by a company that claims to hold the patent for

technology that alerts drivers when they are burning too much fuel...

The judge issued a series of rulings Wednesday both denying summary judgment to three major automotive companies and outlining how he defined the patent claims. Because of

the rulings, Audi of America Inc., Mercedes-Benz USA LLC and Fiat Chrysler, or FCA USA LLC, will have to face the lawsuits.

"This is a vindication of some of the positions we've been taking and we're extremely pleased with the result," James Shimota of Haynes & Boone LLP, representing Velocity, told Law360...

Velocity is represented by **James Shimota, Howard Levin** and **Aaron Taggart** of Haynes and Boone, LLP.

*Excerpted from Law360. To read the full article, please click here.*

### Tom Chen Named 2016 Top 100 Lawyer in California by the *Daily Journal*

Haynes and Boone proudly congratulates Partner Tom Chen who has been named a Top 100 Lawyer by the *Daily Journal*.

Tom Chen is recognized by the *Daily Journal*, in part, for his longstanding relationship with PayPal. Chen supervises about 30 Haynes and Boone patent lawyers who work on PayPal matters. Chen and his team collaborate weekly with PayPal's in-house group to determine whether ideas have value for filing a patent application, how ideas can be built out to increase value and other strategic issues related to PayPal's patent portfolio.

[Read more.](#)

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Haynes and Boone proudly congratulates Partners Purvi Patel Albers and Felicity Fowler for being honored as top businesswomen in Texas by the National Diversity Council (NDC). Albers received a 2016 Texas Most Powerful Business Women award and Fowler was a recipient of the Houston Top 15 Business Women award.

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*Best Lawyers® in America 2017*, published by Woodward/White, Inc., an annual referral guide listing outstanding lawyers throughout the U.S., has recognized 108 Haynes and Boone lawyers across more than 50 practice areas.

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## IP QUIZ

### Trademark Trivia

Is there a likelihood of confusion?

Attempted registration



Registered mark

**RAILS STEAKHOUSE**  
 (“STEAKHOUSE” disclaimed)

for bar and cocktail lounge services, restaurant

**According to the U.S. Trademark Trial and Appeal Board, the answer is NO.**

A divided Board panel reversed the U.S. Trademark Office’s initial refusal of an application to register the mark THE RAIL (and design) covering restaurant and bar services, in light of a prior registration for the mark RAILS STEAKHOUSE (STEAKHOUSE disclaimed) covering identical services. Despite sharing the term RAIL, albeit in singular and plural form, the Board found that the marks were not highly similar and thus weighed against a finding of likelihood of confusion.

The Board focused on the design element of the applicant’s mark, noting that words are not always the dominant portion of a composite word-design mark and finding that the upside-down cow was a unique design and the dominant portion of the overall mark. Focusing on the similarity of the term RAIL would be an impermissible dissection of the marks. The marks also carried different connotations – one of a butcher’s rail and one of railroads. Also important to the Board’s analysis was the prevalence of RAIL-formative marks registered and used in

connection with restaurant and bar services. Given the appreciable coexistence of other RAIL-formative marks, the Board found that the consuming public has become accustomed to distinguishing between the various marks based on slight differences. Thus, despite the legally identical services, the Board found that confusion was not likely.

The dissenting judge disagreed that the individual marks conveyed differing meanings to consumers and noted that it is inappropriate to look at the owners’ interior décor or websites in analyzing the commercial impression imparted by the individual marks. The judge also found that the number of third-party uses of RAIL-formative marks was not significant enough to outweigh the similarities between the relevant services at issue and the lack of care with which such services may be chosen by consumers.

*In re Mariola Burgers, LLC*, Serial No. 85131831 (September 6, 2016) [not precedential].



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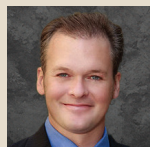
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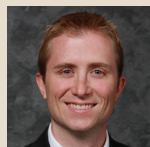
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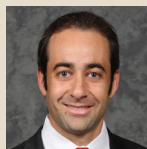
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