

USPTO Panel's Reversal Signals A Shift On AI Patents

By **Daniel Vivarelli, Mitchell Zajac and Priya Dalal** (October 16, 2025)

A Sept. 26 decision by the Patent Trial and Appeal Board, *Ex parte Desjardins*, marks an important development in how the United States Patent and Trademark Office views artificial intelligence inventions.[1]

The ruling underscores that AI-related technologies remain patent-eligible when properly framed as technical solutions that improve the way computers or machine-learning models function. Just as importantly, it offers valuable drafting lessons for innovators and counsel seeking to protect AI-driven innovations in an increasingly nuanced patent environment.

The Case

The application in *Desjardins* involved methods for training a machine-learning model to learn new tasks without forgetting previously learned ones — a concept known in AI research as continual learning. This approach promised to reduce storage requirements and improve model performance, addressing a recognized technical challenge in the field.

Initially, the examiner rejected the claims as obvious over the prior art. On appeal, the PTAB affirmed those rejections but went further, introducing a new ground of rejection under Section 101 of the Patent Act.

The board reasoned that the claims were directed merely to mathematical calculations implemented on a generic computer, the kind of abstract idea that the U.S. Supreme Court's 2014 decision in *Alice Corp. v. CLS Bank* has placed outside the bounds of patent eligibility.

That reasoning, if left unchallenged, could have had broad implications for AI patenting. Many machine-learning innovations rely on novel training architectures, algorithms, or data-processing techniques that can superficially resemble math on a computer. The *Desjardins* applicants recognized the stakes and sought rehearing.

In an uncommon move, the USPTO director convened an appeals review panel to reconsider the decision. The ARP reversed the PTAB's new Section 101 rejection, holding that the claims were not simply abstract mathematics but rather described a concrete improvement to how machine-learning systems operate.

While the claims ultimately remained rejected on obviousness grounds, the ARP's ruling sent a strong message: AI and software innovations are not per se ineligible. When an application clearly articulates how the invention improves the functioning of the underlying computer system or model, it can and should be treated as patent-eligible subject matter.

What the Decision Means



Daniel Vivarelli



Mitchell Zajac



Priya Dalal

The Desjardins decision signals a subtle but meaningful shift at the USPTO. For much of the past decade, applicants have faced uncertainty in the wake of Alice and related cases. Software and AI claims were often rejected as abstract, with examiners and the PTAB focusing more on high-level characterization than on concrete technical contributions.

Now, the pendulum appears to be swinging back toward a more balanced approach. The ARP's analysis reaffirmed that the proper inquiry under Section 101 is whether the claims recite a practical improvement to technology, and not merely whether they involve data or algorithms.

If the claimed invention enhances the way a computer processes information, reduces computational overhead, or enables functionality that did not exist before, it should be eligible for protection.

For AI innovators, that's encouraging news. The decision suggests that the USPTO recognizes the technical nature of many AI advancements, from new neural-network architectures to training efficiencies and model-deployment techniques. However, success still depends heavily on how those innovations are presented in the application itself.

Patent Drafting Lessons for AI Inventions

The Desjardins decision provides a road map for applicants seeking to avoid the Section 101 trap. The key lies in how you connect the technical problem to the technical solution and articulate measurable improvements in performance, efficiency, or capability.

Here are several strategic drafting takeaways.

Lead with the technical problem.

Begin the specification by identifying a specific, concrete problem in computing or model training. For example, in Desjardins, the problem was "catastrophic forgetting," an inefficiency that causes neural networks to lose prior knowledge when trained on new tasks. Framing the problem in technical terms helps establish from the outset that the invention resides in a technological domain, not in abstract math.

Describe how the invention changes system behavior.

Don't merely recite the algorithmic steps; explain their impact. The more clearly you can link each claimed feature to a measurable system-level benefit, the stronger your eligibility position becomes.

Highlight improvements over conventional technology.

Include discussion, along with data or technical reasoning, of how existing systems operated before and what their limitations were. Then explain precisely how your invention overcomes those limitations. Comparative examples, flowcharts, or performance tables can be persuasive evidence that the invention represents a technological advance.

Use claim language that ties to hardware or system architecture.

While you don't need to claim specific processors or circuits, avoid purely mathematical phrasing.

Draft the specification to preempt examiner arguments.

The Desjardins decision is a reminder that the PTAB can introduce new eligibility rejections even if the examiner did not. Anticipate potential Alice challenges by building the Section 101 arguments directly into your specification by emphasizing technical effects, real-world performance improvements, and integration with computing resources.

Consider including experimental or simulation results.

When feasible, include data demonstrating improved outcomes, such as reduced latency or better accuracy with less computation. These details transform abstract statements of benefit into concrete evidence of technical advancement.

Maintain consistency between claims and specification.

Ensure that the claims explicitly reflect the improvements discussed in the specification. If your invention improves training stability, that concept should appear not only in the narrative but also in the claim language. Consistency helps the examiner recognize that the claimed subject matter genuinely delivers a technological improvement.

Strategic Takeaways for Practitioners and Businesses

For patent practitioners and in-house counsel, Desjardins reinforces the importance of early collaboration between inventors and drafting teams. Many AI inventors are scientists or engineers who think in terms of models and equations; the role of the patent attorney is to translate those innovations into the language of technical functionality.

Further, thoroughly documenting how the claimed invention departs from the prior art, and why it constitutes a technical solution, builds a foundation for appeal if needed.

The Bigger Picture

The broader takeaway from Ex parte Desjardins is that U.S. patent law still protects genuine innovation in AI, provided that applicants take care to describe how their technology improves the way computers or models actually function. The USPTO is not closing the door on AI patents; it is asking applicants for clearer, more technically grounded explanations.

As AI continues to transform industries from healthcare to finance to manufacturing, securing robust patent protection will be critical for maintaining competitive advantage. The Desjardins decision should give innovators confidence that with thoughtful drafting and an emphasis on real, demonstrable improvements, the patent system remains open for business.

Daniel Vivarelli and Mitchell Zajac are shareholders, and Priya Dalal is an associate, at Butzel Long.

The opinions expressed are those of the author(s) and do not necessarily reflect the views of their employer, its clients, or Portfolio Media Inc., or any of its or their respective affiliates. This article is for general information purposes and is not intended to be and should not be taken as legal advice.

[1] Appeal 2024-000567.