Cooley

Ex Parte Desjardins: Squires-Helmed USPTO Looks to Train PTAB on § 101 Eligibility of AI-Related Patent Claims

October 6, 2025

Following the September 18, 2025, confirmation of John Squires as US Patent and Trademark Office (USPTO) director, the USPTO recently announced that it will be placing extra scrutiny on patent examiner and Patent Trial and Appeal Board (PTAB) rejections of artificial intelligence-related patent claims based on § 101 subject matter eligibility. In a September 26, 2025, Appeals Review Panel (ARP) decision issued by Squires in *Ex Parte Desjardins et al.*, Appeal 2024-000567, the USPTO *sua sponte* vacated a PTAB § 101 rejection of a Google AI-related patent application, finding the PTAB's rejection "troubling" in light of the importance of AI technology to US interests.[1]

The decision represents one of Squires' first moves as USPTO director and is part of his broader effort to roll back § 101 rejections at the USPTO, which he also signaled by recently signing two patents in technology areas where § 101 rejections have been common – medical diagnostics and cryptocurrency.[2] The ARP decision also fits with steps Squires has taken to limit review of issued patents, formally delegating authority to discretionarily deny inter partes review petitions to outgoing Acting Director Coke Morgan Stewart, which indicates a continuation of recent policies on discretionary denial.[3]

Background

In January 2019, Google filed a US patent application (later published as US Patent Application Publication No. 2019/0236482 A1) related to methods and systems for training machine learning models. The application related to the problem of "catastrophic forgetting," where a machine learning model trained on multiple tasks "los[es] knowledge of a previous task when a new task is learned."[4] For example, the application recited methods for maintaining memory of an earlier-learned task, including constraining changes in a model parameter weight during training for the later-learned task based on the "importance" of the parameter to the earlier-learned task.[5]

During prosecution, the application was finally rejected on § 103 obviousness grounds. [6] Google appealed that rejection to the PTAB. In March 2025, the PTAB affirmed its § 103 rejection and *sua sponte* raised a new ground of rejection under § 101 for lack of patent-eligible subject matter.[7] Using the two-step *Alice* inquiry,[8] the PTAB found that Google's claims were directed to an abstract "mathematical algorithm" and did not "improve the performance of a computer" or claim any other technological improvement, and were therefore invalid under § 101.[9] On July 14, 2025, the PTAB denied rehearing, citing the US Court of Appeals for the Federal Circuit's April 2025 decision in *Recentive Analytics, Inc. v. Fox Corp.*, 134 F.4th 1205 (Fed. Cir. 2025).

The Federal Circuit's *Recentive* decision considered a question of first impression: "whether claims that do no more than apply established methods of machine learning to a new data environment are patent eligible."[10] The Federal Circuit held that such claims are **not** patent eligible, finding that "without disclosing improvements to the machine learning models to be applied" such claims are directed to unpatentable abstract ideas.[11] The PTAB found *Recentive*'s holding supported its § 101 rejection of Google's application, including because the Federal Circuit found that iterative machine learning model training was incident to the "very

nature of machine learning" and therefore not a technological improvement.[12]

On August 8, 2025, a rehearing of the PTAB's March and July decisions was granted *sua sponte*, and an ARP was convened by Senior Lead Administrative Patent Judge Michelle N. Ankenbrand, acting on delegated authority from then-Acting USPTO Director Coke Morgan Stewart, who had recused herself.[13] Following Squires' confirmation as USPTO director on September 18, 2025, he issued a decision on September 26, 2025, from the ARP vacating the PTAB's new ground of rejection under § 101.[14]

The ARP decision

In Squires' September 26 decision, the ARP agreed with the PTAB on *Alice* step one that Google's machine learning patent application was directed to an abstract idea – in this case, a "mathematical concept."[15] However, Squires found that the claims were directed to a technological improvement that rescued the claims from § 101 ineligibility.[16] Per the decision, the claims were directed to an "improvement to how the machine learning model itself operates, and not, for example, the identified mathematical calculation."[17] The decision pointed to disclosures in the Google application indicating memory savings and "reduced system complexity" related to the claimed subject matter.[18] The decision analogized the case to *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), which held that claims directed to an "improvement to computer functionality" could be patent eligible.[19]

Squires' decision also contained more general guidance for the examination of AI-related patent applications, stating that the PTAB applied "overbroad reasoning," which "essentially equated any machine learning with an unpatentable 'algorithm' and the remaining elements as 'generic computer components,' without adequate explanation."[20] Squires characterized the PTAB's decision as "troubling," because "[c]ategorically excluding AI innovations from patent protection in the United States jeopardizes America's leadership in this critical emerging technology."[21]

Thus, the ARP vacated the PTAB's new ground of rejection under § 101, leaving the § 103 rejection intact.[22]

Implications of Squires' ARP decision

The ARP decision suggests a possible reorientation of the USPTO toward § 101 subject matter eligibility of AI-related patent claims, given the dramatic shift from a *sua sponte* rejection over § 101 by the PTAB in March 2025 to a *sua sponte* rehearing and vacating of that rejection by the ARP in September 2025. Further, Squires' guidance against categorically considering AI-related inventions patent ineligible indicates that USPTO rejections or invalidity findings as to AI-related patent applications and patents are likely to face more scrutiny, which logically may lead to more issued patents in this area. Moving forward, the ARP decision signals that the key question for the USPTO in determining § 101 subject matter eligibility of AI-related patent claims is whether they are directed to improving the machine learning models themselves, rather than simply applying the models to new tasks.

It will also be important to watch for any conflict between the reasoning of Squires' decision and the attitude of the Federal Circuit toward AI-related inventions. As noted, the Federal Circuit recently issued a precedential decision (*Recentive*) regarding patent eligibility of AI-related patent claims, finding that the claims at issue in that case did not survive § 101 scrutiny at *Alice* step 2 because they failed to adequately indicate specific improvements to computer functionality.[23] While the *Recentive* court did not categorically rule out the eligibility of AI-related claims, it seemed to take a stricter interpretation of what is required for AI-related claims to survive § 101 scrutiny on *Alice* step 2 than that advanced by Squires. Only future cases will reveal whether the USPTO and the Federal Circuit are aligned in how AI claims are measured against the requirements of § 101.

Notes

1. September 26, 2025, Decision on Request for Rehearing, p. 9.

2. US Patent No. 12,419,201; US Patent No. 12,419,202.

3. September 25, 2025, Delegation of Authority.

4. US Patent Application Publication No. 2019/0236482, [0004].

5. *Id.*, [0007].

6. December 27, 2022, Final Rejection, pp. 4, 27, 39, 42.

7. March 4, 2025, Decision on Appeal, Appeal 2024-000567, pp. 17-25.

8. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 US 208, 216 (2014).

9. *Id.*, pp. 21, 23-24.

10. *Recentive*, 134 F.4th at 1211.

11. *Id.*, at 1216.

12. July 14, 2025, Decision on Request for Rehearing, Appeal 2024-00567, p. 7 (citing Recentive, 134 F.4th at 1212).

13. August 8, 2025, Order Convening Appeals Review Panel and Granting Sua Sponte Rehearing, pp. 1-2.

14. September 26, 2025, Decision on Request for Rehearing, p. 2.

15. *Id.*, pp. 6-7.

16. *Id.*, pp. 7-9.

17. *Id.*, p. 9.

18. *Id.*

19. *Id.*, p. 8 (citing *Enfish*, 822 F.3d at 1339).

20. *Id.*, p. 9.

21. *Id.*

22. *Id.*, p. 10.

23. *Recentive*, 134 F.4th at 1215-16.

Key Contacts

Orion Armon Colorado	oarmon@cooley.com +1 720 566 4119
Daniel Knauss Palo Alto	dknauss@cooley.com +1 650 843 5287
Alexandra Leeper Palo Alto	aleeper@cooley.com +1 650 843 5376
Patrick Lauppe Washington, DC	plauppe@cooley.com +1 650 843 5833