

## [The Licensing Journal, \*IP Diligence in the Age of AI: Why Standard Review Is No Longer Enough\*, \(Jun. 1, 2026\)](#)

The Licensing Journal

### *IP Diligence in the Age of AI: Why Standard Review Is No Longer Enough*

**Matthew Grady**

*Matthew Grady is a Shareholder in the Electrical & Computer Technologies Practice at Wolf Greenfield. Clients both large and small turn to Matt for tailored, strategic solutions that focus on valuable business goals and assets. He guides clients through the development of effective intellectual property-building strategies incorporating utility patents, design patents, trademarks, copyrights, and trade secrets.*

*This article is intended for informational purposes only and does not constitute legal advice. For guidance on IP strategy or diligence matters, please consult qualified intellectual property counsel.*

IP diligence comes in many forms—and in today’s environment, it demands more than ever before. Whether the context is a financing round, a strategic partnership, or a full acquisition, the intellectual property portfolio of a target company is a window into its long-term commercial viability. Savvy investors, partners, and acquirers have always known to scrutinize ownership, coverage, and strategy. But current activity in the federal courts—particularly around artificial intelligence—signals that a deeper layer of review is now essential.

Federal district courts are increasingly reviewing AI-based inventions with rigor, and in some cases, outright skepticism. Recent subject matter eligibility decisions have invalidated patents on AI-based inventions, putting enormous pressure on portfolios that rest on broad or potential “abstract” AI claims. For investors and counsel alike, this means that checking the standard boxes is necessary but no longer sufficient. Understanding the nature of the technology itself—and whether it reflects genuine, protectable innovation—has become a critical component of any thorough diligence effort.

## **The Foundation — Standard Examples of IP Diligence**[\[1\]](#)

Before turning to the specialized considerations of AI, it is worth reaffirming what rigorous baseline diligence looks like. The following ten areas provide a framework for confirming that a target’s IP portfolio is organized, defensible, and connected to a credible business strategy. Not all companies need to dive into each of these areas, but collectively they provide insight into the steps that tie IP to strategic value, validate strategy, validate defensibility, and secure investment over the long term.

### **1. Align IP Strategy with Business Objectives**

At its core, IP diligence evaluates whether the portfolio meaningfully supports the company’s commercial objectives. Diligence counsel should understand the R&D pipeline, product roadmap, and regulatory timelines, and confirm that patent strategy is synchronized with key commercial milestones. A company that can articulate a clear and credible narrative about the strength and value of its portfolio—and how that portfolio connects to revenue and growth—offers a far more stable foundation for investment or partnership than one whose IP exists in a strategic vacuum.

### **2. Summary of Programs, Strategy, and IP Position**

Diligence proceeds more efficiently—and signals better management—when a company can quickly communicate its

IP landscape. A concise executive summary of key programs and how each is protected, including core patent families, geographic coverage, and, for example, projected loss of exclusivity (LOE). Having this material reduced to writing and succinctly stated limits unnecessary follow-up, avoids misalignment, and demonstrates disciplined portfolio stewardship. In practice, investors and acquirers are reassured by organized, accessible materials; the absence of them raises questions that delay and sometimes derail transactions.

### **3. Develop Freedom-to-Operate Position**

A proactive freedom-to-operate (FTO) strategy may involve initial clearance analysis and periodic monitoring of the patent landscape, with scope and timing calibrated to the company's risk profile and resources. Being surprised by a third-party patent during diligence undermines credibility. Equally important is how identified risks are documented: presenting potential FTO issues alongside reasoned mitigation strategies—whether grounded in non-infringement, invalidity, design-arounds, or licensing—builds confidence rather than concern.

### **4. Clear Patentability Narrative and Maintain Disclosure Discipline**

Diligence teams may ask about the closest prior art for key inventions, anticipated prosecution strategies for pending applications, and potential validity challenges to issued patents. Thorough prior art searches and a well-developed patentability narrative help anticipate these discussions. Companies should also demonstrate compliance with the duty of disclosure under [37 C.F.R. § 1.56](#), with regular audits confirming that Information Disclosure Statements (IDSs) are complete and current.

### **5. Strong Portfolio Hygiene**

Even technically strong patents lose value if foundational ownership and formalities are not in order. Diligence frequently exposes gaps in inventorship, chain of title, or basic documentation—issues that affect valuation and delay transactions. Counsel should periodically confirm accurate inventorship for pending and issued patents, ensure assignments and declarations are properly executed and recorded, maintain current maintenance fee payments across relevant jurisdictions, and track inventions developed with U.S. government support for Bayh-Dole compliance.

### **6. Review Third-Party Agreements for IP Impact**

Inbound and outbound licenses, collaboration agreements, joint research agreements, material transfer agreements, and related contracts shape the practical value of any patent portfolio. Key considerations include the scope of license grants, field and territorial limitations, sublicensing rights, and ownership of improvements or jointly developed IP. Employment and consulting agreements should confirm proper assignment of IP to the company. Any agreements involving U.S. government funding warrant particular scrutiny, given Bayh-Dole obligations and potential domestic manufacturing requirements.

### **7. Treat Trade Secrets as a Managed Asset**

For many companies—particularly those whose core competitive advantage lies in unpatented know-how, proprietary data sets, manufacturing processes, or other confidential business information—trade secrets may be among the most valuable assets in the portfolio. Their protection depends entirely on the consistent implementation of reasonable secrecy measures. Diligence should confirm that key trade secrets are identified, that confidentiality and assignment provisions in employment and contractor agreements are enforceable, and that access controls, employee training, and structured onboarding and offboarding procedures demonstrate active management. Specifics of AI implementation can even be the source of trade secret protection while pursuing patents on other aspects of the

AI implementation.

## 8. Structured Open Source and AI Governance

Modern diligence increasingly scrutinizes open source software (OSS) and artificial intelligence practices. Certain copyleft licenses may impose source code disclosure obligations that, if unmanaged, can affect the value and commercialization of core technology assets. Companies should maintain a current inventory of third-party code, implement a formal OSS policy distinguishing pre-approved and high-risk licenses, and conduct regular compliance reviews.

AI governance is now a parallel concern. Diligence teams assess risks of confidential information leakage through public AI tools, as well as ownership and infringement questions related to AI-generated content. A clear, written AI policy—prohibiting input of confidential information into public tools and defining approved uses—demonstrates that emerging technology risks are being managed deliberately rather than reactively.

## 9. Conduct a “Practice” Diligence

Reviewing sample diligence questionnaires or conducting a mock diligence with outside counsel before a live transaction can reveal gaps in portfolio management or documentation on a manageable timeline. Treating diligence preparation as a rehearsal—rather than a reactive exercise—ensures that when an actual transaction arises, the company can respond efficiently and with confidence.

## Deeper Review — The AI Patent Landscape and the Courts

Standard diligence, rigorously applied, is necessary. But for companies whose value proposition is rooted in artificial intelligence, it is not sufficient. The courts have been sending a clear signal: not all AI-based inventions are created equal, and investors who do not look beyond the surface of an AI patent portfolio may be acquiring rights that are more fragile than they appear.

### The Subject Matter Eligibility Problem

Under [35 U.S.C. § 101](#), a patent must claim patent-eligible subject matter. Abstract ideas—including mathematical concepts, certain mental processes, and generic computational steps—are not eligible for patent protection unless the claim adds “something more” that amounts to significantly more than the abstract idea itself. For AI inventions, this framework has proven to be a serious and recurring obstacle.

The question courts have increasingly asked is whether an AI patent claim describes a genuine technical improvement, or whether it merely recites the application of a generic AI or machine learning model to a particular field or domain. The latter, recent court cases have increasingly found, is not enough.

### ***Recentive Analytics v. Fox Corp.*: Applying AI to a Field Is Not a Technical Improvement**

In *Recentive Analytics, Inc. v. Fox Corp.*, the Federal Circuit addressed patent claims directed to the use of machine learning to optimize television network schedules and map generation. The court found the claims patent-ineligible under § 101, holding that they were directed to abstract ideas—the optimization of schedules and maps—with no meaningful technical improvement beyond the application of machine learning to those existing problems.

The court’s reasoning is instructive. It was not that machine learning itself was abstract; it was that the claims failed to recite any specific improvement to machine learning technology. The patents did not describe a novel training

approach, a new model architecture, or a technical advancement in how the AI system itself operated. They simply applied machine learning—described at a high level of generality—to a particular industry problem. For the court, that was insufficient to confer patent eligibility.

The implications for diligence are significant. A portfolio full of patents claiming the use of AI or machine learning in a specific domain—without more—may be a portfolio at serious risk of invalidation. Investors and counsel must look past the novelty of the application and ask whether the underlying technology is itself protectable.

### ***In re Brian McFadden*: Broad AI Claims Without Technical Grounding**

*In re Brian McFadden* presented similar concerns at the USPTO level. The claims at issue were broadly directed to AI-based methods without articulating the specific technical mechanisms that would distinguish them from conventional computing. The Board's rejection reflected a consistent theme: patent claims that invoke AI or machine learning at a high level of abstraction, without tying the innovation to a concrete technical improvement, will not survive § 101 scrutiny.

Together, *Recentive* and *McFadden* illustrate a landscape in which the mere invocation of AI—however sophisticated the underlying product—does not guarantee meaningful patent protection. For diligence purposes, this means that an AI-heavy patent portfolio requires a closer look at what the patents actually claim and whether those claims are grounded in protectable technical innovation.

## **What to Look For — Technical Depth in the Disclosure and Patent Claims**

The deeper diligence question is not whether a company uses AI—virtually every technology company does—but whether its IP portfolio captures genuine technical innovation in how that AI is built, trained, deployed, or improved. The following are the categories of technical advancement that are most likely to yield durable, defensible patent protection.

### **Specific Improvements to Model Training**

Generic claims to “training a machine learning model” on a particular type of data are unlikely to survive § 101 scrutiny. By contrast, patents that describe novel training methodologies—for example, new approaches to data preprocessing, innovative loss functions, techniques for handling imbalanced or sparse training data, or methods for transfer learning that yield measurably better performance—have a stronger foundation for eligibility and validity.

Diligence should ask: does the patent describe how the model is trained in a way that is technically specific and non-obvious? Is the training approach something that a skilled practitioner would not have arrived at through routine experimentation?

### **Novel Model Architecture**

Architectural innovations in AI—new network topologies, attention mechanisms, memory structures, or hybrid approaches that combine different model types in technically non-obvious ways—can form the basis of strong patent claims. These are not claims to using a neural network; they are claims to a specific structural configuration that yields improved results for technically articulable reasons.

A diligence review should identify whether the company's patents claim specific architectural features, and whether those features are described with enough precision to be meaningfully distinguished from the prior art.

## Improved Feedback and Model Updating Mechanisms

Dynamic AI systems that learn from deployment—through reinforcement learning from human feedback (RLHF), online learning, or other adaptive mechanisms—can give rise to protectable innovations if those mechanisms are described with technical specificity. Claims directed to novel feedback loops, specific methods of incorporating user behavior or real-world outcomes into model updates, or techniques for continual learning without catastrophic forgetting are examples of the kind of technical depth that supports patent eligibility.

## Differences in Technical Implementation That Yield Better Performance

Perhaps the most practically important category for diligence is innovations that achieve demonstrably better accuracy, precision, efficiency, or reliability through specific technical choices—not merely through the application of AI to a new domain. Patents that describe, for example, a particular feature engineering approach that reduces false positives in a detection system, a preprocessing pipeline that improves model robustness to distribution shift, or an inference optimization that reduces latency without sacrificing accuracy, are grounded in technical reality in a way that would survive § 101 review.

The key question is whether the improvement is a function of the AI system itself or merely a function of applying AI to a problem. The former is protectable; the latter is called into question after *Recentive* and *McFadden*.

## System-Level Innovations Beyond the Model

Valuable patent protection in AI does not always reside in the model itself. Technical innovations in the surrounding system—in data pipelines, in the integration of AI outputs with downstream processes, in hardware-software co-design, in privacy-preserving inference techniques, or in robustness and security measures—can yield strong, defensible claims that are not vulnerable to § 101 challenges rooted in the abstract idea doctrine.

Diligence should map the company's patent claims not just against its product roadmap but against the technical architecture of the system as a whole. Where are the genuine technical advances? Are those advances captured in the patent portfolio, or has the company focused its prosecution efforts on higher-level application claims that are now at risk?

## Conclusion: Diligence That Pays Dividends

Standard IP diligence—ownership, coverage, strategy, FTO, hygiene, agreements—remains the essential foundation. Any company preparing for a transaction should be checking all of these boxes, and any investor or acquirer should be confirming that they are checked before acting. A well-managed portfolio, clearly connected to the company's commercial strategy and free of the gaps that derail deals, is itself a signal of organizational discipline and long-term thinking.

But for companies whose value is tied to artificial intelligence, standard diligence is only the beginning. The district courts have made clear that AI patents built on broad, application-level claims—without genuine technical innovation in the underlying systems—are vulnerable. *Recentive Analytics* and *In re McFadden* are cautionary tales; they reflect an evolving judicial approach to § 101 that will continue to shape the AI patent landscape.

The investor or counsel who looks deeper—who asks not just whether the portfolio exists, but whether it captures real technical advances in model training, architecture, feedback mechanisms, and system-level implementation—will be better positioned to assess true value and anticipate litigation risk. Securing protection for actual technical improvements, not just for the application of AI to a domain, is the work that pays dividends: in prosecution, in

licensing, and ultimately, in the district court.

In an environment where AI is everywhere and genuine technical differentiation is the exception rather than the rule, IP diligence that goes beyond the checklist is not just best practice. It is a competitive advantage.

---

### Footnotes

- <sup>1</sup> Jane Doe 1 et al. v. X.AI Corp. et al., Case No. 5:26-cv-02246, in the U.S. District Court for the Northern District of California, Complaint ¶ 1.

[https://prod.resource.cch.com/resource/scion/document/default/\(%40%40PAA01%20WK-JSTORY20260601-4\)paa013cab20f7a77147a0a8775f89002350d0?cfu=Legal&cpid=WKUS-Legal-Cheetah&uAppCtx=cheetah](https://prod.resource.cch.com/resource/scion/document/default/(%40%40PAA01%20WK-JSTORY20260601-4)paa013cab20f7a77147a0a8775f89002350d0?cfu=Legal&cpid=WKUS-Legal-Cheetah&uAppCtx=cheetah)