

Questions To Ask Inventors Before Drafting AI Patents

By **Theresa Stadheim and Ryan Phelan** (November 14, 2025)

The U.S. Patent and Trademark Office's evolving guidance on artificial intelligence-related inventions has made one thing clear: Clarity at the outset is critical.

In its 2024 and 2025 memoranda on AI subject matter eligibility, the USPTO not only cautioned that merely applying an abstract idea using AI or machine learning will not render an invention patentable, but also signaled a commitment to providing clearer pathways for protecting genuine technological innovation in this space.

The 2025 memo, in particular, emphasized examiner consistency and encouraged applicants to highlight the concrete technical improvements their AI inventions achieve — a tone many see as a positive step toward predictability in examination.

Functional claims and patent eligibility issues under Title 35 of the U.S. Code, Section 101, often go hand in hand. Broad functional claims, especially those lacking specific structure, are frequently challenged under Section 101 for claiming abstract ideas or mere functions rather than patent-eligible subject matter.

Overly broad functional claims can be deemed ineligible because they fail to provide the technical details or specific, inventive steps necessary to move beyond an abstract concept.

Patent practitioners can avoid these challenges by conducting a detailed inventor interview before drafting a patent application.

The inventor interview is significant when drafting patent applications directed to AI or machine learning. The abstract nature of AI innovations, often embodied in software, algorithms or machine learning models, rather than tangible physical components, can make it difficult for inventors to clearly articulate their invention's patentable aspects.

Furthermore, some inventors may not specialize in AI technologies, or the AI involved plays a supporting role in other inventive aspects of the invention.

Patent practitioners can circumvent some of these issues by having a plan to elicit information from the inventors.

The Overarching Strategy of the Inventor Interview

There are specific steps you should take as soon as you get a new invention disclosure to help protect AI and machine learning-related inventions against any of the vulnerabilities described above.

Before you talk to the inventors, review the disclosure to see how the inventors describe machine learning and AI concepts, and how these concepts relate to the core of the invention.



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Tailor the questions you will ask at the disclosure interview. Typically, machine learning-related inventions will focus on one or more of the following areas: machine learning architecture, training methods or input data. The questions you will ask, and the details you should get, will vary based on the areas in which your invention falls.

The gold standard, and your ultimate goal, is to get the inventors to describe precisely how machine learning achieves an improvement in the functioning of the computer.

It can often be difficult to get an inventor to verbalize this. However, during the interview, stress that simply applying a generic machine learning model to a new field is not sufficient for patent eligibility.

The patent must describe a specific technical innovation or an improvement to the technology itself, which can be a difficult concept for inventors to grasp. You can help solidify and direct the conversation by raising any such improvements.

If possible, have the inventors describe an improvement to the AI model itself: If the invention improves the underlying AI, such as a novel architecture or more efficient training technique, emphasize these details. This could include enhanced speed or accuracy resulting from the model's structure, as well as novel approaches for filtering training data that require fewer computing resources.

Note that training and adjusting a machine learning model will not be enough for patent eligibility — iterative training and real-time updates are not a technical improvement.

Also, patentability may stand on a detailed explanation of technical steps, such as curating training data or modifying the model architecture — innovations to the AI model itself, via a novel training process that improves the model for a given task.

Perhaps the inventors can describe how the training led to the discovery of connections that would not have been possible to find otherwise.

Another strategy is to connect the invention to a concrete technical problem. Draw inventors away from the business problem being solved and have them explain the technical challenges the invention solves.

Some may conflate these two issues, but one way to nail down the technical problem is to have the inventors describe specific tangible hardware and software environments. For example, have the inventors describe how AI-generated results provide input to a subsequent process or a larger system to perform a concrete action. Again, this helps you with figure drafting.

If the inventors can provide any pseudocode or architectural diagrams, make sure to include or at least describe these in your specification and figures. Sometimes inventors have access to performance metrics, which can be helpful to demonstrate model effectiveness and how the models — or overall invention — improve upon conventional approaches.

Suggested Interview Questions

Helpful interview questions include (1) general AI questions, (2) questions on AI architecture, (3) questions on the AI model training process, (4) questions on data collection and inputs, (5) questions on preprocessing steps, (6) questions on AI model

inference/output, and (7) questions on post-processing steps.

With respect to general AI questions, ask the inventor to describe the technical challenges that led them to use AI in the invention. Here, you may learn how conventional approaches fell short. This can also help forestall obviousness and abstract idea problems during prosecution.

With respect to AI architecture, ask whether the model architecture is customized or is a preexisting or open-source AI algorithm, such as Google TensorFlow or another model from the Hugging Face AI library. If the model is custom, ask whether the inventors modified the standard architecture to improve performance.

Here, you may learn whether to claim features around the model. You can also stress improvements here to forestall abstract-idea rejections.

Regarding the AI model training process, you should have the inventors specify the learning algorithm they used for the AI invention. You could request details on the training data that the inventors used to train the network, how they obtained or labeled the data, and any automated procedures used for labeling.

With respect to data collection and inputs, patent attorneys may ask inventors about the data they input into the AI model, how they collected the data, the hardware or systems used to collect the data, and the format of the data when collected. This can help forestall abstract-idea concerns by incorporating hardware.

With respect to preprocessing steps, assuming, as is often the case, that the disclosure uses a conventional core machine learning model, the patentable invention can lie in the novel steps for preparing the input data — or processing the model's output, discussed in more detail below.

Have the inventors draw out the inputs and outputs to any models. This has the added benefit of helping you develop system diagrams later.

With respect to specific interview questions, you may wish to inquire how the inventors manipulated or transformed the input data. For example, how did the inventors process the raw data before providing the data to the AI model, or how did they use the data to train the AI model?

Attorneys may request specific details on whether and how the data changed format between collection and use by the model, whether and how the inventors used statistical or aggregational techniques on the raw data, and whether the data is proprietary, publicly available or both.

With respect to AI model inference/output, patent attorneys may inquire about the outputs generated by the trained model, whether the model is updated as a result of inference and how the input data is expected to change over time.

With respect to post-processing steps, the patent attorney should ask how the output of the AI model is processed, used or otherwise made usable.

The inventors may provide specific details on calibration and transformation of the outputs. For example, some AI inventions involve manipulating or transforming output data for downstream use. Details here can help address concerns about abstract ideas during

prosecution.

Once you have all of the above, you can start drafting your claim. Typical AI or machine learning claims will discuss input data, training or other inventive aspects, often feeding results or predictions to other operations in other claim limitations. If your inventors are patent savvy, it can be helpful to get their input on the claims before further drafting.

USPTO Guidance and a Reason for Optimism

On Aug. 4, 2025, the USPTO leadership issued a memorandum to Technology Centers 2100, 2600 and 3600, which provided reminders on evaluating subject matter eligibility of claims under Section 101. Particular attention was paid to AI or machine learning patent considerations.

Attorneys can take actions to forestall indefiniteness, abstract-idea and enablement rejections based on this memorandum. For example, the memorandum reinforces the importance of fully describing technological improvements and implementation details.

Furthermore, USPTO Director John Squires recently expressed pro-patent views regarding AI-related patents. He has indicated a significant shift toward limiting rejections based solely on subject matter ineligibility under Section 101, favoring instead an analysis based on the traditional requirements of novelty, nonobviousness and Section 112 standards.

Squires has stressed technical concerns, which only underscore the advice provided in this article. This recent USPTO guidance to the examination corps, in combination with Squires' statements, should make patent attorneys optimistic regarding the future of AI patenting.

Conclusion

To forestall indefiniteness, abstract idea and enablement issues, patent practitioners should explain the technical aspects behind the most novel pieces of their inventions. Lack of sufficient detail can lead to both ineligibility under Section 101 and indefiniteness or lack of enablement under Section 112.

While Sections 101 and 112 are legally distinct, the two issues are practically linked for AI inventions. Conducting your inventor interview to gather enough technical detail to satisfy the definiteness and enablement standards of Section 112 often requires the same level of technical specificity needed to overcome an abstract idea rejection under Section 101.

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