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Empowered, Not Replaced: The Risks and Rewards of Using AI Tools in Patent Prosecution

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European Union, United Kingdom | December 29 2025

With the rapid rise of AI and extreme hype around generative AI tools in the workplace, patent firms around the world have had to seriously consider to what extent they will embrace or resist the use of AI in their day-to-day work.

The discussion points at a recent WIPR webinar ("*AI and the Future of Prosecution: Empowering Attorneys, Not Replacing Them*") suggest that, rather than fearing AI as a potential replacement for human patent attorneys, we should consider how embracing AI tools in the right way can help improve the efficiency and quality of patent prosecution.

This year, the topic of AI in patent prosecution has been all over the headlines on both sides of the Atlantic. In Europe, the EPO cautioned against relying on LLMs for claim interpretation without substantiating those conclusions with additional supportive evidence (T1193/23). Just this month, the UK's Intellectual Property Regulation Board (IPReg) have released an Interim Policy Statement on the "Use of Artificial Intelligence in Professional Practice" setting out IPReg's regulatory position on the matter. There is also exciting news from across the pond, as the USPTO have recently launched their new Artificial Intelligence Search Automated Pilot (ASAP!) Program to trial the use of AI to conduct pre-examination prior art searches, identifying a "top ten list" of potential prior art documents before substantive examination.

One thing is for sure: the role of the patent attorney is evolving. This webinar made it clear that as patent attorneys move towards incorporating AI into their daily workflow, having an expert as the "human in the loop" remains more critical than ever.

We have compiled our key takeaways from the webinar, including our thoughts on the risks and rewards of using AI in patent prosecution.

How do patent attorneys feel about using AI tools for patent prosecution in 2025?

Polls taken by viewers of the webinar reflect an industry in an experimental transition phase. While **52%** of respondents had experimented with AI, only **15%** were regular users.

The hesitation is driven by valid concerns:

- The lion's share, **42%**, of respondents were most worried about the **accuracy or hallucinations** of AI outputs
- For **19%**, the main worry was **data privacy and confidentiality**
- Only **3%** were most concerned by **losing attorney control or oversight**
- Interestingly, **0%** of respondents said they were most concerned about the **cost or effort required to learn and adopt the tool**
- The second largest group, **34%**, were concerned about ***all* of the above** potential risks

Therefore, it appears the main barrier is likely not the upfront investment in an AI tool, or the learning curve involved in using the AI tool, but the accuracy and confidentiality risks that may be introduced by the use of AI.

Navigating the risks

As was made clear by the poll results, adopting AI for patent work comes with risks to be mitigated, including:

Confidentiality

Entering invention details into a public generative AI tool carries a serious risk of disclosing an invention before a patent application has been filed which can prevent patent rights from being obtained.

Of course, there is a difference between secure, local, purpose-built AI tools and public LLMs such as ChatGPT. To be safe, patent firms, inventors and applicants should keep any confidential or sensitive information, such as technical details, drawings, or enabling descriptions of an invention, away from unsecured AI tools.

Hallucinations and inaccuracy

Unlike (most) humans, you won't catch generative AI models admitting to being stumped or confused. Typically, generative AI models are trained to provide confident prose by producing statistically likely word sequences. This can lead to dreaded hallucinations and errors, where the content that is generated can be incorrect or fabricated (e.g. non-existent case law, out-of-date statutes or incorrect technical information).

Therefore, it is crucial that all AI-generated outputs are checked and verified by an expert who is comfortable with the subject matter, especially when it comes to legal citations, prior art references and technical descriptions.

Loss of control and over-reliance

Some fear that over-reliance on AI can lead to a loss of the patent attorney's fundamental drafting and legal research skills or prevent the patent attorney from steering the ship.

To mitigate this, wherever they are adopted, AI tools must be treated as just that – a tool – and not a replacement for legal knowledge, technical understanding and strategic analysis.

How AI could empower patent attorneys

Any patent attorney would shudder at the thought of blindly filing a completely AI-generated patent application at the patent office. However, as highlighted in the webinar, there are certain aspects of the patent prosecution process that may benefit from AI assistance.

The webinar discussion emphasised that there is potential for patent attorneys to delegate basic tasks to AI, so that patent attorneys can spend more of their time focussing on key value-adds such as crafting patent claims to strike the right balance of scope and patentability, developing convincing arguments for patent prosecution and advising on patent strategy.

Areas where AI tools may play a valuable role include:

AI-powered searching: Many patent offices in key jurisdictions are already actively incorporating AI tools for prior art searching. Similarly, patent searching companies, commissioned to perform patentability, freedom to operate (FTO), and invalidity searches, typically integrate AI functionality to improve their searching capability.

Research: It was mentioned in the webinar that AI could be used by a patent attorney to get up to speed with the general technical background on a case before speaking to an inventor or for information gathering or research on a specific technical topic. Of course, care must be taken to ensure the information is sufficiently interrogated

to ensure relevance and accuracy.

Drafting Assistance: AI tools could potentially be used to assist patent firms with generating, populating or checking certain sections of documents – e.g. reporting letters, response letters and (in some cases) patent applications. Over the next few years, it will be interesting to see the impact that AI-supported drafting will have on the industry as a whole.

AI as a sounding board: For the times when colleagues are not available for a discussion, engaging in some productive back-and-forth with an AI tool, for example, to pressure test arguments or identify reasoning loopholes, was suggested in the webinar as a potential use for AI.

Attracting Talent: It was suggested that future talent may gravitate toward progressive firms that are at the forefront of legal technology, where they can leverage modern tools to save time and focus on in depth legal strategy and technical input.

As we look to the future, we may see patent applicants opting to work with progressive firms that responsibly and intelligently use AI productivity tools in pursuit of faster high quality work. It is expected that hard-won patent expertise will be put toward refining more complex points of nuance, rather than building up the basics. However, the take home message is clear: to make sure best practices are followed and the risks are safely managed, a human patent attorney must remain responsible and in full command of the work product. As emphasised by the recent IPReg Interim Policy Statement, if you cannot confidently check the accuracy of the output of work provided by AI, then it is likely that you lack the expertise or competence to deliver it. It is of vital importance that this is kept in mind for all intellectual property work, not just patent prosecution.

For inventors and applicants, the potential time and cost saving benefits are exciting but the risks may not be readily apparent. Therefore, it is crucial that patent applicants continue to be guided by patent attorneys who are well-placed to understand and navigate the risks associated with using AI in patent prosecution.

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