Drafting the Future: GenAI in Patents

The patent application industry is on the brink of a GenAI-led revolution. The tedious and repetitive traditional process stands to gain significant improvements with the help of GenAI solutions. General benefits such as time efficiency, cost reduction and improved quality can be paired with firm-specific gains such as a willingness to patent more, innovative business models and a focus towards more value creating tasks.

The traditional patent application process is filled with inefficiencies and complexities that not only consume time but also drain resources. Innovators are hardly thrilled when they have to extensively explain and detail out their invention for each application, requiring careful drafting to ensure legal compliance and protection of intellectual property. They want to focus on inventing and creating new products, processes and solutions, and not boring paperwork.

The introduction of GenAI in the patent application process, like the solution developed by the Swedish startup Lightbringer, holds promise for streamlining these operations. They aim to transform them into more manageable, less error-prone, and significantly faster activities. Exploring this transition is important as it can impact innovation speed and, consequently, competitiveness in the global market.

From the vantage point of Lightbringer's GenAI solution, which has already been used to draft a significant number of patents, the authors sought to understand the current perceived value and concerns associated with GenAI in patent drafting through qualitative interviews with prospective and current customers.

The findings from the thesis reveal that the perceived value and concerns of GenAI in patent drafting vary across different stakeholders and customer segments. For larger firms, GenAI could enable scale in operations and processes, while smaller innovative firms enjoy lower costs and simplified filing, speeding up the protection of vital innovations and increasing the willingness to apply for patents, further leading to positive impacts such as access to investors and networks. IP-firms seek enhanced quality and consistency, opening doors to innovative business models.

Concerns such as AI hallucination, data security and field adaptability and specialization are slowing down the adoption. This leads to a need to devise solutions, that reap the benefits but handle the concerns, by both the GenAI tool providers and the other stakeholders in the patent industry.

Delving into and understanding these desired benefits and challenges, bringing knowledge into how to cater even more tailored and effective tools that enhance adoption rates, is therefore paramount. The findings of this research could also offer valuable lessons for other sectors considering GenAI integration. Industries that rely heavily on data processing, complex decision-making, and extensive documentation—such as legal, medical, and engineering fields—can learn from the advantages as well as adoption challenges in the patent application industry.

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