Navigating AI with Pestalozzi – Part 5: Intellectual Property

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Key Takeaways

- **Using generative AI applications which are trained, fine-tuned, or prompted on IP protected content may infringe third-parties' IP rights and bear liability risks for the user of a generative AI application.**

- **Currently, generative AI cannot be the author of a work of art or the inventor of a technical invention.**

- **It is unsettled yet to what extent a user of AI applications can be considered the author of a work result generated with a generative AI system based on their prompts. At least in cases in which the AI application is used as a mere tool in an overall process and a human had sufficient influence on the result, the output could potentially be subject to IP protection. For most cases, however, works created with generative AI applications will not be accessible to IP protection.**

- **To mitigate the risks of third-party IP infringements, to protect the company's own IP rights, and to avoid inadvertent disclosure of trade secrets and other business-related confidential information, it is recommended that a company carefully reviews the general terms and conditions of the AI provider, especially with regard to the use of the company's data for training purposes and the ownership in any work results, created by the AI application.**

- **AI is a great technology for generating first ideas and assisting with subordinate aspects of work creations. However, it should be used with caution for the creation of final work products, especially when it is key to claiming exclusive rights in such work products.**

- **Internal AI policy guidelines as well as appropriate instruction and training of staff members are pivotal to a responsible use of AI in connection with IP protected content.**

Introduction

Currently, many companies are adopting AI to generate content and by doing so, often rely on so-called generative AI applications like ChatGPT and Microsoft Copilot. These applications are able to create text, computer code, images, audio and video content in response to their user's prompt. To receive such output, users can – within their prompts – "feed" the AI application not only text, but also computer code, images, audio and video content. With these AI applications, opportunities come along, but also significant legal risks, especially with regards to the protection and infringement of intellectual property rights.

Intellectual property ("IP") refers to intangible creations, such as creative works of art, trademarks, designs, and inventions. IP rights are intended to give means to their holders to prevent or control the use of their IP by others. This naturally also applies to the use of IP protected work results in connection with generative AI applications.

Infringements of Third-Party IP Rights

Before generative AI applications can be used, they must ingest enormous quantities of training data. This data may also include IP protected content. Once trained, the AI can then generate "new" content, based on the ingested data. If, for example, asked to create a poem or a new brand name the AI application draws on pre-existing and potentially IP protected corresponding content for reference. IP can also be included in the prompts entered by a user, be it the user's own IP rights or third-parties' IP rights. The training and the use of generative AI applications can thus potentially amount to an infringement of third party IP rights, if the IP protected content used to train, fine-tune, or prompt the AI application was not licensed for such purposes. Similarly, there is also a risk that the AI "plagiarizes", i.e., produces outputs that incorporate or are otherwise derivative of protected content with no significant changes to it. Generally, when used in a commercial context, the more the output resembles the IP protected content, the more likely it is to constitute an infringement.

Where the AI has been trained on IP protected content, users might face allegations of IP infringement if they use the outputs in a commercial context. The liability for IP infringement does not depend on the intention or knowledge of the infringer. Likewise, if IP protected input belonging to a third-party is used by the generative AI application to further train the system, the user could potentially be made liable for contributory IP infringement with respect to the training of the application with this third-party content and future results created by the generative AI application. It is therefore recommended to refrain from uploading third-party content into a generative AI application without previously making sure that the system will not use such content for its further training, in particular by checking the applicable terms and conditions of the generative AI provider.

Infringement of Copyrights

In the context of the use of generative AI applications, the infringement of copyrights is the focus.

Copyright law grants the creator (i.e., the "author") of a work of art (such as a painting, a photograph, a song, a code) exclusive rights regarding the use of such work. Particularly, the author alone decides on how, when, and by whom their work is used and is entitled to determine whether their work can be copied and whether these copies may be reproduced. This exclusive reproduction right also includes the digital copying of a work. Uploads and downloads or the storage of a work on a data carrier are all considered reproductions.

During the training of generative AI, in particular when creating the training data set and during the training, technical reproductions of entire or parts of copyrighted works may be made. Similarly, a digital copy of a work is created when the work is used as a prompt or to fine-tune. If the copyright holder of the relevant works has not consented to such use of their works, these actions may qualify as infringement of their exclusive reproduction right.

While the author's exclusive right is generally subject to certain exceptions, none of the exception provisions under current copyright law grant a comprehensive justification for the use of copyright protected works with generative AI in the commercial context. As examples, data sets created when training, fine-tuning, and prompting generative AI usually do not meet the criteria for temporary or accompanying copies, and the scientific exception only allows the use of copyrighted works for training, fine-tuning, and prompting, if these acts are carried out for the main purpose of scientific research. And this is rarely the case.

Protection of Work Results Created with Use of Generative AI Applications

Some companies may have an interest in protecting "their" work results generated with help of generative AI applications. Since the concept of most IP rights has originally been designed to protect intellectual creations of humans, however, whether IP rights can or should be available to the outputs of generative AI is a hotly debated topic.

Protection of Copyrights

To qualify for protection under copyright law, a work must, among other things, be intellectual in the sense that it originates in the mind of the human author. While AI has admittedly been trained by humans, and while its algorithms are very complex and simulate to some extent the human brain, their direct output is – according to the current legal doctrine – generally not considered the result of a human's creative effort.

However, the question arises whether, in certain cases, the user of a generative AI application could be considered the author of a work considering the user's (creative) prompts. At least in cases in which the AI application is used as merely a tool in an overall creative process, and a human had sufficient creative influence on the result, the output might be subject to copyright protection, whereby the user and not the AI application itself would be considered as author.

However, there is currently significant legal uncertainty regarding the copyright ownership of the final creation. One could also argue that other than the user of the AI application, also the person who programmed the underlying algorithm of the AI application, who trained the AI, or who provided the input data for the specific project, could be considered as (co-)authors of a work and therefore be granted protection under copyright law.

Protection of Inventions

For inventions, similar considerations arise as for copyrights. As a matter of fact, generative AI has already been used to help with new inventions, for example, in drug design. However, at least to the extent where the core inventive contribution was made by the generative AI system, most patent offices and courts abroad have so far rejected patent applications for inventions created by AI because patent laws require a human inventor to be listed on a patent. Hence, the same reasoning applies for the refusal of copyrights for works created by generative AI, namely that the original purpose of patent law is to foster human innovation by rewarding human intellectual efforts. How an AI application can be considered as a contributor to a patented invention, if at all, is currently uncertain.

Based on the above, it might seem intuitive to not indicate the AI as the inventor on a patent application, but instead the "human using the AI". Similarly, as to the discussion with respect to copyrights, this approach might work where the AI application was used as a mere tool by the inventor. However, the discussion is more complex with patent law. The use of generative AI does not only impact the question whether patents for inventions made with these tools are accessible to patent protection at all, but also regarding the question how generative AI applications are to be considered in the analysis of the inventive step.

Given the lack of legal certainty in this respect, it seems, for the time being, advisable to protect core inventions primarily made by AI in the form of trade secrets and know-how, rather than by applying for patent protection and risking the disclosure of the invention without any appropriate reward.

Contractual Limitations to Obtaining Ownership in Work Results Created with Generative AI Applications

Even if a work result, created using generative AI, is not subject to intellectual property protection, there may be contractual provisions (usually in the general terms and conditions ("GTC")) between the provider and user of an AI application that govern the use of the work product. These GTC could, for example, foresee assigning ownership of any content created by AI to the AI provider. This would mean that the AI provider can freely use the work results created by the user of this AI application. This might be disadvantageous to the user's business interests. By contrast, other AI providers, such as OpenAI, have in their current GTC opted to assign rights to the output to the users, or make such assignment subject to certain conditions, for example, by stipulating that the role of the AI application, in creating the output, is clearly disclosed. This assignment of rights to the user of an AI application is, however, only possible to the extent it was "fully" created by that user and no third-party IP rights are infringed. Evidently, the GTC cannot transfer any third-party IP rights to the user, and any provision therein stating otherwise would not be enforceable.

Trade Secrets and Other Confidential Information

In addition to the danger of infringing third-party IP rights, there is also a risk that businesses are inadvertently disclosing trade secrets or other business-related confidential information when using, training, or prompting generative AI – be it their own trade secrets or third-party trade secrets. As mentioned, user prompts may be saved and used by the AI provider to improve their tools. If trade secrets or other business-related confidential information is used as part of a prompt, potentially not only can the application provider acquire a copy of this information, but the trade secret or confidential information may also become part of the AI application, and thus be included in some form in the output of other users. In other words, trade secrets and confidential information are at risk of being shared with the AI provider or even publicly with other users. In addition, this use puts the trade secret or confidential information at an increased risk of being hacked and/or leaked to third-parties. Finally, disclosing third-parties' trade secrets to other third-parties may even lead to criminal liability. As a result, we strongly recommended to either refrain from feeding generative AI applications with confidential content or to first consult the applicable terms and conditions to ensure risks cannot arise.

Recommendations

Still, there are many open questions both regarding the possibility of obtaining IP rights when generative AI applications are used and relating to the risks of infringing third-party IP rights or violating confidentiality obligations. As such, caution is demanded when using generative AI applications in this context.

In particular, companies should keep in mind the following:

- Ownership of training data. Consider using generative AI applications that have been solely trained on data belonging to the AI provider and/or the company itself, the public domain, or which have been, by third-parties, appropriately licensed to an AI provider.

- Ownership of output. Be aware that you will likely not be able to claim IP rights in the work results obtained by using generative AI applications. Hence, where exclusivity is key to your business purposes, human creativity is still demanded. In any event, review the GTC of a generative AI provider regarding ownership of the output and any IP rights related thereto, and ensure that you are entitled to (exclusively) use all work products created though the AI application.

- Information used for prompting. Be cautious with the information you use as an input for the AI application, and avoid using information that either:
  1. is protected by IP rights of third-parties, which you are not licensed to use for this purpose, or
  2. constitutes a trade secret or other business-related confidential information.

- Use of your data as training data. Consider using generative AI applications that operate on a private cloud and check the settings on generative AI applications to see if they allow an AI provider to store and train on user's prompts. Whenever possible, seek appropriate (legal) protections and assurances against the use, storage, and training of the AI on the company's prompts to protect the company's trade secret and other confidential information.

- Restraint in the use of (unmodified) AI-generated work results. Limit the use of generative AI to business-internal use or to generate ideas, but not to create a finished work product. If you decide to use generative AI to create finished work products, run reasonable checks on such outputs for any IP infringements before using them commercially. Most AI applications have integrated tools to prevent IP infringements; however, currently these are not sufficiently reliable.

- Internal compliance processes. Put in place technical and practical safeguards (e.g., access limitations to certain AI applications, appropriate staff training and policies for use) to reduce the risk of producing IP infringing outputs and to prevent unintentional use of your IP protected works for further application training and, importantly, disclosure of trade secrets and confidential information.

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No legal or tax advice

This legal update provides a high-level overview and does not claim to be comprehensive. It does not represent legal or tax advice. If you have any questions relating to this legal update or would like to have advice concerning your particular circumstances, please get in touch with your contact at Pestalozzi Attorneys at Law Ltd. or one of the contact persons mentioned in this legal update.

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