

Copyrightability of Artificial Intelligence Prompts

Miao Wu

Jurisprudence (Civil and Commercial Law Oriented), Law School, East China University of Political Science and Law, Shanghai, 201620, China

*

Keywords: Natural Language Processing, Artificial Intelligence, Prompt, Copyrightability, Copyright Law.

Abstract: The rapid development of artificial intelligence (AI) models in natural language processing has transformed prompts from purely technical tools into commodified digital assets with substantial commercial value. This transformation has given rise to a burgeoning prompt trading market and triggered debates surrounding the copyrightability of prompts. This paper examines whether and how prompts may be eligible for copyright protection, emphasizing the necessity of constructing an institutional framework to safeguard the legitimate rights of prompt creators and users, support the trading market, and facilitate the sustainable advancement of AI technologies. To that end, the paper undertakes a comprehensive analysis of the essence, features, and internal structure of prompts, aiming to assess the rationality and legal feasibility of affording copyright protection under existing legal doctrines. Specifically, it focuses on three core aspects: the textual expression constituting originality, the qualification and role of the author, and the intellectual labour embedded in the creation of prompts. Moreover, this paper proposes enhancing the legal response by extending judicial interpretation to establish clearer standards. It further advocates for a novel paradigm of human-computer collaboration and the strengthening of industry self-regulation, thereby striking a balance between incentivizing innovation and preventing the monopolization or abuse of digital rights.

1. INTRODUCTION

With the development of artificial intelligence (AI) in the field of natural language processing, the threshold of generative artificial intelligence has been gradually reduced, which also makes the significance of AI prompts in human-computer interaction continue to rise. It is more well-structured and professional, morphing from a simple technical command tool into a text collection with originality, professionalism, and functionality, giving rise to the emergence of the prompts trading market. PromptBase, a platform that provides artificial intelligence prompts trading, and customization services, for example, attracts more than 300,000 users according to its official website, indicating the great market potential and massive economic value of prompt engineering and prompt creation. However, despite the fact that the prompt trading market has begun to take shape on an international scale, the legal positioning and rights protection of prompts have not yet been clarified in the legislation and judicial practice of various countries.

In the increasingly prosperous situation of prompt trading, it is urgent to give prompts a clear position and protection, to provide a guarantee for the development of prompt authors and the trading market, and also provide a solid foundation for the development of artificial intelligence technology. In this regard, the article analyzes the copyrightability of prompts by combining the nature and characteristics of prompts, and proposes a path of identification, which further provides ideas for the optimization of international prompt copyright protection.

2. ANALYSIS OF THE JUSTIFIABILITY AND CHALLENGES OF COPYRIGHT PROTECTION FOR PROMPTS

In practice, prompt transactions have formed a market of a certain scale. This part explores the basis of its

* Corresponding author

possible copyright protection through the sorting out of its nature and characteristics, as well as the analysis of the legislative purpose of the copyright law and the logic of protection. At the same time, the existing dilemma of prompt copyright protection in prompt trading is also clarified.

2.1 The Nature, Classification, and Characteristics of Prompts

In the field of natural language processing, a prompt usually refers to an instruction or a set of instructions for guiding a generative AI to produce desired output content, which can be in form of natural language and other forms such as images, with characteristics such as intangibility, replicability, functionality, as well as structural hierarchy and composability (Huang & Rust, 2024 ... Schulhoff et al, 2025).

According to application scenarios and functional differences, prompts can be broadly classified into six categories: input semantics, output customization, error identification, prompt improvement, interaction, and context control; according to the usage and complexity, prompts can be classified into general-purpose prompts, application-specific prompts (e.g., drawing, code generation, etc.), and nested high-level prompt types. The structure of prompts usually includes elements such as information expression, functional instructions, and creative structure, aiming to guide the model to generate outputs that meet expectations (White et al, 2023).

Professional, high-quality prompts hold great potential for their completeness and excellent output orientation, and users can dominate the generative AI with these high-quality prompts to do the expected or even exceed the expected work for the users at the least possible debugging cost. Prompts are characterized by two features in terms of value realization: first, their value is dependent on model capabilities rather than direct presentation; second, they are vulnerable to reverse engineering and cracking after trading, leading to market price collapse (Wyk et al, 2023).

2.2 The Compatibility Between Prompt Protection and the Legislative Purpose and Logic of Copyright Law

As a property right system to stimulate innovation, copyright law is guided by the value and institutional function of "encouraging creativity", under which "creativity" as an important concept dominates a

series of legal rules (Zhang, 2025). In addition, taking China's copyright law as an example, the legislative basis and purpose of Article 1 of the Copyright Law of the People's Republic of China reflect this core value and institutional function, and its constitutional basis lies in the protection of citizens' fundamental rights, namely, freedom of expression and freedom of creativity, which also makes it clear that works protected by the copyright law can only be the intellectual achievements created by natural persons (Zhang, 2025).

Due to the varying needs and the absence of a fixed path or template, prompt creation lacks a one-to-one correspondence between the prompt and the intended output. As a result, similar outputs can be produced by different prompts. This characteristic grants authors a degree of creative autonomy.

With respect to authorship, although the unique nature of prompts often necessitates the use of artificial intelligence—whether for feedback, optimization, or even direct generation—prompt creation may involve varying degrees of human and AI involvement. Nevertheless, prompts that possess sufficient economic value are, in essence, predominantly human-directed.

Therefore, prompt engineering as an emerging discipline, the inclusion of prompts in the scope of copyright protection can not only stimulate market vitality but also incentivize creation and establish a healthy market based on the exclusive protection of authors, and it also promotes the development of artificial intelligence technology.

2.3 The Similarities Between Prompts and Code in Copyright Protection

Among the types of intangibles traditionally protected by law, codes and prompts have the most similarity and referability in terms of their manifestation and nature, and the feasibility of prompt copyright protection can be further explored by analyzing the protection of codes in legislation and judicial practice.

Firstly, both prompts and code are functionally oriented artifacts, with authors arranging words to essentially fulfill a function. Prompts guide the AI through natural language in a function-like relationship to generate the intended output, and similarly, codes are functional tools. Notably, their functionality is protected through patents in some countries, such as the United States (Zhao, 2010).

Secondly, the similarity between prompts and codes in terms of expression form and creation process is reflected in the fact that both of them are

textual expressions. The composition of prompts as natural language instructions is itself a sequential combination of words, making it possible to become an original text; while codes are likewise literal forms of expression, i.e., readable sequences of symbols (Schulhoff et al, 2025). The U.S. Federal Court of Appeals for the Third Circuit in 1983 explicitly defined both source code and object code as "literary works", and the core of their copyright protection lies in their "textual expressiveness" (Geissler, 2015).

2.4 The Dilemma of Rights Protection for Prompts

The realization of the property rights and interests of AI prompts as commodities in practice has been greatly impeded by the fact that, due to their special nature of existing in plain text form, they are extremely easy to be copied, disseminated, and tampered with, which seriously undermines their original market value and trading potential. In the absence of an exclusive protection mechanism, a prompt is in the public domain once it has been sold, making it difficult for authors to control their subsequent use and circulation, leading to a downward spiral in market prices and dispersed revenues, and hampering the normal formation and sustained development of the market for prompts (Wyk et al, 2023).

3 ASSESSMENT PATHWAY FOR THE COPYRIGHTABILITY OF PROMPTS

3.1 Textual Composition and Originality of Prompts

In the use of natural language models, prompts are mainly presented in textual form, and scholars have affirmed to some extent that "the 'user input' made to an AI may itself constitute a textual work" when discussing copyright over AI-generated objects (Wang, 2024).

3.1.1 Functional Collection of Text

The essence of a prompt lies in a collection of words that form natural language instructions, with its originality evident in the systematic arrangement and functional design of linguistic symbols. Since "copyright law only protects expressions that demonstrate originality, and excludes practical elements such as methods of operation, technical

solutions, and functional applications from its protective scope", the functionality of prompts—viewed as text-based instructions—cannot be afforded copyright protection (Wang, 2021).

In many cases, merely transmitting work instructions to a generative AI system is insufficient to satisfy the originality criterion for copyright protection. Even when the desired outcome is meticulously delineated, the prompt still cannot be deemed copyrightable due to its technical functionality and inherent utility (Verch, 2024). However, the existence of the prompt as a tool governing artificial intelligence and its capacity to fulfill a specific function cannot be disregarded. This does not, in and of itself, preclude the possibility of protection under copyright law. Therefore, while acknowledging its functionality, further exploration of the intricacy of its text and the substance of its original expression is necessary to elevate it to a level where it can be safeguarded by copyright legislation.

3.1.2 Collection of Text with Original Expressiveness

Unlike other forms of artificial intelligence that operate based on predetermined paths and fixed procedures, generative AI introduces an element of unpredictability in its outputs. This unpredictability elevates the significance of prompts within human-AI interactions and has contributed to their increasing complexity and specialization. As a result, prompts may embody a certain level of creativity and expression, potentially qualifying as literary expressions with originality (Mazzi, 2024).

Accordingly, in case-by-case evaluations, where a prompt demonstrates a sufficient degree of originality, it may be recognized as a written work under copyright law and thereby qualify for legal protection.

Under the originality standards of different jurisdictions, the European Union tends to emphasize whether a prompt demonstrates sufficient creativity and reflects the personal imprint of a human author (Mazzi, 2024). In *Infopaq International A/S v. Danske Dagblades Forening*, the Court of Justice of the European Union (CJEU) held that even text fragments as short as 11 words may qualify as protectable works, provided they embody the intellectual choices and expression of the author.

Under the United States standard, originality requires more than mere labor; prompts must exhibit a minimal degree of creativity, such as through the inclusion of unique, imaginative, or innovative elements (Mazzi, 2024). In *Feist Publications, Inc. v.*

Rural Telephone Service Co., the U.S. Supreme Court held that “a modicum of creativity” is the threshold for copyright protection. As long as the author makes minimal creative choices—such as in the selection, coordination, or arrangement of content—even simple expressions may merit protection (Wang, 2021).

In conclusion, comparative legal standards regarding the copyrightability of short texts and works embodying a “minimal degree of intellectual creativity” may serve as valuable references in assessing the copyrightability of prompts, which often take the form of short texts containing both functional and original expression.

3.2 The Authorial Subject of Prompts

Even if a prompt qualifies as an “original expression,” it remains necessary to determine the legal authorship of the work. Due to the unique characteristics of prompts, their authors may involve hybrid authorship. This section examines the copyrightability of prompts under various types of creative authorship structures.

3.2.1 Human-Created or AI-Generated Prompts

Copyright only protects the works of humans as laborers. “Since only human beings can understand and utilize the incentives of the copyright law, only the results of human creations can be protected by the copyright law as works” and AI developers and users cannot directly determine AI-generated content based on their free will, thus excluding AI developers and users from the subjective scope (Wang, 2023).

In other words, to date, in the general practice of States, copyright protection can only be granted to works whose authors are “human beings from beginning to end and only human beings”. Therefore, it is difficult to recognize AI-generated works as the subject of copyright protection. Therefore, the copyrightability of a prompt is based on the fact that the prompt constitutes an original expression and is created by a human being based on his or her free will.

3.2.2 Human-AI Collaborative Prompts

In the discussion of copyright attribution of AI-generated objects, it has been argued that since the subject of its creation is not a human being, and a human being is unable to decide on the generated object by his/her free will, and therefore it is difficult for a human being to obtain copyright even if he or she has put in a certain degree of labor in the human-computer interaction.

However, in the process of prompt creation, interaction with generative AI is virtually inevitable, whether for testing, generating, or optimizing prompts. A blanket exclusion of copyright protection for prompts involving AI intervention could pose significant risks to the development of the industry.

Therefore, in assessing the copyrightability of prompts, it is advisable to adopt a more flexible approach to the human-machine collaboration paradigm within a clearly defined institutional framework. For instance, the traditional theory of authorship under copyright law may be reconsidered and restructured to accommodate a new category of collaborative works through a “dual-subject model of creation.” Under this model, works designed through human-machine collaboration could be recognized as joint creations of both human and machine authors (Wu, 2024).

3.3 Intellectual Labor in the Process of Creating Prompts

Advanced and high-quality prompts are characterized by structural complexity, often comprising multiple layers such as basic directives, creative arrangements, and system-level architecture. Furthermore, due to the stochastic nature of large language models, where identical prompts may yield varying outputs across multiple iterations, it becomes necessary for prompt designers to engage in extensive testing and continuous refinement to maintain output quality in the face of such unpredictability (Wyk et al, 2023 & Zamfirescu-Pereira et al, 2023). In domain-specific contexts, such as medicine, prompt engineering requires the creator to possess substantial subject-matter expertise. By contrast, non-experts often adopt ad hoc or opportunistic approaches to prompt design, which tend to lack systematicity and are prone to overgeneralization or excessive reliance on personal interaction experience (Zamfirescu-Pereira et al, 2023). This evidences that prompt creation transcends mere instruction-giving or mechanical compilation. It is not simply the result of “sweat-of-the-brow” labor, but rather a form of intellectual creation that may qualify for copyright protection.

4 RECOMMENDATIONS FOR THE LEGAL PROTECTION PATHWAYS OF PROMPTS

Admittedly, the intrinsic characteristics of prompts, coupled with technological limitations, pose

significant challenges to the realization of their property rights. Nevertheless, legal regulation can play a pivotal role in promoting the recognition and protection of prompts across other domains. That said, such regulation must be carefully calibrated to a minimal threshold. Excessive legal protection risks fostering monopolistic practices through the abuse of rights, thereby undermining technological innovation and impeding the broader development of AI-driven industries.

4.1 Recommendations for the Legal Protection Pathways of Prompts

In view of the rapid pace of technological advancement, it is more feasible to expand the scope of judicial interpretation to clarify whether prompts can be considered objects of copyright protection and to establish the corresponding criteria for such recognition. This would help prevent the inclusion of prompts that are overly simplistic, highly functional, or fail to meet authorship requirements from falling within the scope of protection.

Some countries have extended the applicability of existing copyright laws to address the copyrightability of AI-generated content. For instance, the UK Intellectual Property Office (IPO), in its consultation paper “Artificial Intelligence and Intellectual Property”, stated that AI-generated content may be protected under the current legal framework. It also expressed its intention to remain engaged at the international level and to revise, replace, or repeal relevant protective clauses as necessary (Wu, 2024).

Currently, there is no judicial precedent explicitly addressing the copyrightability of prompts. In practice, determinations rely heavily on judicial discretion in individual cases, due to the absence of uniform standards. The regulation of prompts could draw on existing approaches to AI-generated works, thereby enhancing legal flexibility without the immediate need for dedicated legislation.

4.2 Establishment of a New Paradigm for Human-AI Collaboration

Given the inseparability of prompt creation from generative AI, a new paradigm may be developed—one that emphasizes the substantial involvement of human authors in the creative process and adopts a dual-ownership framework. This approach can draw upon existing scholarship on models of human-machine collaboration in the context of the copyrightability of AI-generated outputs (Wu, 2024).

4.3 Strengthening Industry and Market Self-Regulation of Prompt Use

Various types of generative AI models and prompt trading platforms should actively formulate industry standards. These standards should clarify the rights and obligations of generative AI service providers, service users, prompt authors, and prompt consumers. They should also provide specific protection for prompts involving copyright and regulate behaviours with infringement potential. This will promote the reasonable distribution of rights and protection in the industry through self-regulatory mechanisms. This promotes the reasonable distribution of rights and protection in the industry, avoids excessive legal intervention through independent industry regulation, and further standardises the market.

5 CONCLUSION

With the rapid development and popularisation of generative artificial intelligence in natural language processing, legal disputes triggered by it have become an urgent and unavoidable response to the reality of the problem. The importance of prompts as core inputs in generative artificial intelligence operations has grown, giving rise to a significant prompts trading market. This has prompted reflection on copyright protection for prompts.

Although prompts have significant functional attributes that prevent them from being included in the traditional scope of copyright protection to a certain extent, it should also be recognised that, under the development of artificial intelligence, prompts are becoming more complex and professional texts that need to be arranged and debugged by authors. Therefore, some prompts can have original expressions, and the possibility and reasonableness of obtaining copyright protection for such prompts should be recognised. The possibility and reasonableness of obtaining copyright protection for such prompts should be recognised. Furthermore, while prompt creation relies on artificial intelligence for feedback and optimization, human intervention and intellectual labour are still substantial, so the new paradigm of human-computer collaboration can be standardised and regulated within certain limits. Furthermore, given that prompt creation often requires specialised knowledge and multiple rounds of debugging, it maps to a higher degree of intellectual work, and therefore has economic value.

Although the current international judicial practice does not legally recognise or protect the

rights of prompts, action taken by countries such as the United Kingdom can be taken as reference, namely expanding the scope of application of the law through judicial interpretation, to clarify the uniform determination standard of the copyrightability of prompts. Furthermore, a novel paradigm of human-computer collaboration should be established, and the human-computer collaboration model should be strengthened. Additionally, the industry's self-regulation should be enhanced to further regulate the market.

In conclusion, while there are certain challenges in determining appropriate and clear copyright protection for AI prompts, establishing their copyrightability protects the property rights and interests of prompt authors. It also provides a systematic basis for protecting the interests of those trading in prompts and consumers and empowers the sustainable development of AI technology. Furthermore, it protects scientific and technological innovation, as well as industrial upgrading.

- P. Liu et al., 2023. Pre-train, prompt, and predict: A systematic survey of prompting methods in natural language processing. *ACM Comput. Surv.* 55, 195.
- Q. Wang, 2021. Textbook of intellectual property law (7th ed.) (Renmin Univ. China Press, 2021), 92
- Q. Wang, 2023. Further discussion on the copyright classification of AI-generated content. *Trib. Political Sci. Law*, 41, 16.
- Q. Wang, 2024. A Third Inquiry into the Legal Status of AI-Generated Content under Copyright Law, *Law Bus. Stud.*, 41, 182.
- S. Schulhoff et al., 2025. The prompt report: A systematic survey of prompt engineering techniques. *arXiv:2406.06608*, 5.
- U. Verch, 2024. Per Prompt zum Plagiat?: Rechtssicheres Publizieren von KI-generierten Inhalten, *API Mag.*, 5, 9–10.
- X. Amatriain, 2024. Prompt design and engineering: Introduction and advanced methods. *arXiv: 2401.14423*, 1.

REFERENCES

- C. J. Geissler, 2015. Oracle America, Inc. v. Google, Inc., 750 F.3d 1339 (Fed. Cir. 2014). Cert. denied: Ideas, methods, and expression - whose innovation is protected? *Cath. U. J.L. & Tech.* 24, 264.
- F. Mazzi, 2024. Authorship in artificial intelligence-generated works: Exploring originality in text prompts and artificial intelligence outputs through philosophical foundations of copyright and collage protection. *J. World Intellect. Prop.*, 27, 414.
- H. Wu, 2024. On the copyrightability of AI-generated content: Practice, legal theories, and institutional frameworks. *China Law Rev.*, 3, 127.
- H. Yao et al., 2023. PromptCARE: Prompt copyright protection by watermark injection and verification. *arXiv: 2308.02816*, 3.
- J. D. Zamfirescu-Pereira et al., 2023. Why Johnny can't prompt: How non-AI experts try (and fail) to design LLM prompts. *Proc. CHI Conf. Human Factors Comput. Syst.*, ACM, 2.
- J. White et al., 2023. A prompt pattern catalog to enhance prompt engineering with ChatGPT. *arXiv: 2302.11382*.
- L. Zhang, 2025. Reanalyzing the legal nature of AIGC works from the perspective of legal philosophy. *Intellect. Prop.* 3, 12.
- L. Zhao, 2010. Conflicts of legal philosophy and technical dilemmas in patent protection of software source code. *Legal Syst. Soc.*, 8.
- M. H. Huang, R.T. Rust, 2024. Automating creativity. *arXiv: 2405.06915*, 16.
- M.A. van Wyk et al., 2023. Protect your prompts: Protocols for IP protection in LLM applications. *arXiv:2306.06297*, 1.