



# Practice Tips and Case Studies: Rebuttal to the Examiner's Reliance on Asserted Common Knowledge in the Art

Featured  
Article

Lack-of-inventiveness is the most frequently asserted ground for rejection of a patent application by a Chinese patent examiner. Accordingly, knowing how to attack the examiner's assertion is an important patent prosecution skill, when the technical features are identified by the examiner as common knowledge. In this short article, we discuss practice tips, together with case studies, in the context of the examination of patent application claims by a patent examiner. Note that the same principles apply in the context of inter partes patentability challenges before the China's Reexamination and Invalidation Division.

## 1. Preparation before responding to an office action

### *a) Dispelling fear of difficulties*

In contrast to the citation of prior art references, a Chinese patent examiner does not refer to comparison documents when citing common knowledge (such as conventional means) in practice, and in some cases just explains the reasons. However, it should be recognized that common knowledge is prior art, and there is no fundamental difference from the prior art references in general. Therefore, when facing the common knowledge citation, one shall dispel the fear of difficulty, and then analyze it just as the general prior art.

### *b) Concretizing abstract features*

In patent drafting, the technical features themselves are brief. For example, "It is characterized in that the roller A is made of a metal material that is not easily deformed". Because the technical characteristics themselves are so concise, the technical characteristics are

abstract, or it is difficult to form a complete and comprehensive impression on the technical characteristics alone. Therefore, it seems common knowledge that the roller is made of a metal material that is not easily deformed to increase its strength. In order to fully and accurately grasp the technical characteristics, it is necessary to concretize brief and abstract technical characteristics. For example, in this example, on the basis of understanding the invention, the feature "roller A is made of a metal material that is not easily deformed." can be visualized as "In the field of printing presses, in order to solve the technical problem of paper deviation in printing, the platen roller made of plastic is usually made of a metal material that is not easily deformed". After visualization, it becomes clear that this feature is used to solve the technical problem of paper misalignment in printing instead of increasing the strength. Therefore, the identification of this feature as common knowledge is no longer a matter of course.

## **2. Rebuttal to the examiner's reliance on common knowledge**

The concretized technical features have elements such as the technical field, the technical problem to be solved, and the technical means. These elements have become the common pointcut for the defense.

### *a) Technical field*

Regarding the diversion of cross-technology fields, the Guidelines for Patent Examination points out that "When judging the inventiveness of a diversion invention, it is usually necessary to consider: the distance of the technical field of the diversion, whether there is corresponding technical enlightenment, the degree of difficulty of diversion, whether it is necessary to overcome technical difficulties, the technical effects brought about by the diversion, and so on." When considering inventiveness of a claimed invention, the above cross-technical factors are also the main factors to be considered.

The case Shenzhen Zhaori Technology Co., Ltd. v. China National Intellectual Property Administration for administrative dispute over the refusal of invention patent is one of the top ten typical cases of technological innovation issued by the Beijing Intellectual Property Court in 2020. The significance of this case is that it involves the identification of common knowledge in different or unrelated technical fields.

The patent involved is an invention patent entitled "An anti-counterfeiting method and system that uses the physical characteristics of a substance to identify itself". Its technology is used to identify the authenticity of banknotes and bills. The principle is that when the bill or banknote is new, light is used to transmit, and the physical feature images that can reflect the internal fiber texture of the bill or banknote are kept at the bottom to form a basic database; When it is necessary to distinguish the authenticity of the above-mentioned bills or banknotes after circulation, their physical characteristic images are collected through light transmission again, and the authenticity is

determined by comparing with the basic database. The main invention of this application is that data such as the internal fiber texture of the transmissibility material is collected by light transmission, which is more conducive to improving the accuracy of the comparison.

In the substantive examination, the examiner introduced the transmitted light photography technology recorded in the "Encyclopedia of Chinese Public Security" and believed that the major invention feature of the application involved was common knowledge in the field. After being rejected in examination and maintained rejection in re-examination, the applicant filed a lawsuit to the Beijing Intellectual Property Court.

In the Beijing Intellectual Property Court (2017) Jing 73 Xingchu No. 1688 Administrative Judgment, the court held that: as far as the transmission light photography technology is concerned on page 1059 of the "Encyclopedia of Chinese Public Security" as evidence of common knowledge, the transmission light photography technology mentioned above belongs to the trace detection technology applied in the field of criminal investigation. Its purpose is to obtain the physical characteristics of the trace carrier left at the crime scene through transmission light photography, so as to reconstruct the crime scene and analyze the crime method to find possible suspects based on these clues and the knowledge and technology of criminal investigation. This technical field is obviously far from the field of anti-counterfeiting authentication. Therefore, it should not be assumed that the acquisition of material internal information through the transmission of light photography technology is a common knowledge technology in the field, nor should it be concluded that the technical solution of the application can be conceived by those skilled in the art only by simple logical analysis.

It can be observed from this typical case that even if a feature is recognized as common knowledge, if the technical field is different, it is necessary to comprehensively consider the

distance of the technical field, whether there is corresponding technical enlightenment, the degree of difficulty of transfer, whether it is necessary to overcome technical difficulties, and the technical effects brought by the conversion.

*b) Technical problem to be solved*

Even if the technical field is the same, it cannot be easily determined that the common knowledge has technical enlightenment for the application if common knowledge in the technical field usually solves a technical problem different from the technical problem solved by the technical features in the application.

The utility model patent with the patent number 201320452441.6, entitled "Vertical air conditioner duct structure and vertical air conditioner indoor unit" was requested for invalidation, and its claim 1 is that "...the body is provided with a mounting surface, and between the mounting surface and the heat exchanger is provided a baffle that can separate the air supply channels corresponding to the double tubular wind wheel and is detachably arranged on the mounting surface".

After trial, the collegiate panel believes that the difference between claim 1 and evidence 1 lies in the fact that the partition is detachably mounted on the mounting surface of the volute or the volute tongue body. Regarding this distinguishing feature, the patent specification clearly states that "when different models or matching different heat exchangers, the original air duct structure size may not be able to meet the requirements of the new model, and the mold needs to be reprocessed, which increases the cost of the mold", "the main purpose of the utility model is to... improve the versatility of the vertical air conditioner air duct partition, and the air outlet effect of the indoor unit of the air conditioner, and reduce the cost of the mold", "a partition that can separate the air supply channel corresponding to the double tubular wind wheel and is detachably arranged on the mounting surface is provided between the mounting surface and the heat exchanger". It can be seen that this patent solves the problem of

versatility of air duct components by detachably setting the partition plate, so as to achieve the beneficial effect of meeting the needs of different sizes of heat exchangers and different types of air conditioners. ...Evidence 3 states that the connection is "divided into detachable and non-detachable connections according to the possibility of disassembly"; the detachable connection is "after several times of repeated disassembly and assembly, the connecting piece and the connected piece are still not damaged, and the original connection quality can be guaranteed, such as threaded connection, spline connection, etc.". It can be seen that for those skilled in the art, the detachable connection is usually set based on the connection quality and the purpose of repeated disassembly and assembly without damaging the equipment. This is not the same as the technical problem solved by the use of detachable partitions in this patent, which is, improving the versatility of air duct components to be suitable for different types of air conditioners or matching different heat exchangers to reduce mold costs. ...Although evidence 3 can prove that the connection method including detachable connection itself is common knowledge, it cannot prove that it is applied to the air duct structure of air conditioners to solve the problem of versatility of partitions, and to meet the beneficial effects of different sizes of heat exchangers and different types of air conditioners. In addition, based on the evidence submitted by the requester, there is no record that the partitions or other components in the air duct structure of the air conditioner are detachably connected to solve the problem of commonality of components, and based on the evidence submitted by the petitioner, there is no evidence that it is common knowledge in the field to use the aforementioned distinguishing features in the air duct structure of the air conditioner to solve the technical problem claimed in this patent. Therefore, the petitioner's argument that the above-mentioned distinguishing feature is a common knowledge lacks sufficient basis, and the collegiate panel does not support it.

It can be seen from the opinions of the collegiate panel that even if the technical features themselves are common knowledge, but if the technical problems to be solved and the technical effects achieved are not common knowledge, that is, the use of common knowledge beyond the common understanding of those skilled in the art to solve other technical problems and achieve other technical effects cannot be simply regarded as obviousness.

### *c) Correlation between technological means*

If the technical field, the technical problem to be solved, and the technical means are all the same, does it necessarily result in obviousness? The answer is negative. Because technical characteristics and technical means are not isolated, they are related through certain technical ideas. And if this correlation is not obvious, the technical solution may not be obvious as a whole.

In the invalid administrative dispute case against the patent ZL201110369508.5, the Supreme People's Court stated in the (2020) Supreme Law Zhixingzhong No. 85 Administrative Judgment: ...this court further believes that in order to avoid improper understanding that the technical solution of the invention is just a simple superposition of multiple existing technologies, and a highly undervalued or "hindsight" of the inventiveness of the invention happens, in judging whether there is a combined technical enlightenment in the prior art, while examining the above-mentioned "different technical features have the same role in the invention and the prior art", the internal correlation between the distinguishing technical features and other technical features in the technical solution of invention protection cannot be ignored. This kind of internal connection will have an important impact on the difficulty of combining technical features with the closest existing technology. If in the technical solution for invention protection, there is a mutually supportive and interactive relationship between the distinguishing technical features and between the distinguishing technical features

and other technical features of the invention, which produces an overall technical effect that the prior art does not have, and the prior art or common knowledge does not reveal this mutually supportive and interactive relationship, it should be considered that the process of combining the distinguishing technical features with the closest existing technology to form the technical solution to be protected by the invention requires the inventive work of those skilled in the art. Only according to the fact that each distinguishing technical feature of the technical solution protected by the invention is disclosed in other prior art or belongs to common knowledge, it is not sufficient to conclude that the prior art has given technical enlightenment for combining distinguishing technical features or common knowledge with the closest prior art to form the technical solution to be protected by the invention.

From the above judgments of the Supreme People's Court, it can be seen that in addition to distinguishing whether the respective technical features play the same role in the invention and the prior art, it is also necessary to consider the internal correlation between the distinguishing technical features and with other technical features. If the mutually supportive and interactive relationships between the features result in an overall technical effect that is not available in the prior art, it cannot simply be considered as obviousness, even if the features are disclosed or belong to common knowledge, and even if the distinguishing technical features play the same role in both the invention and the prior art.

### **Conclusion:**

Common knowledge is a type of prior art, so there is no need to be afraid of it. The technical features are brief and abstract. In order to grasp the technical features comprehensively and accurately, the technical features can be concretized. In view of concretized technical features and common knowledge, attacking the examiner's assertion can be started from

summarizing the argument by analyzing the technical field, the technical problems to be solved, and the correlation between the technical means. Of course, as common knowledge is a type of prior art, the following

response means are also applicable to it: the invention solved a technical problem that had been eager to solve but never succeeded, the inventions had overcome technical prejudices, and the invention had achieved unexpected technical effect, etc.

*The "Featured article" is not equal to legal opinions. If you need special legal opinions, please consult our professional consultants and lawyers. The email address of our company is: [ltbj@lungtin.com](mailto:ltbj@lungtin.com) which can also be found on our website [www.lungtin.com](http://www.lungtin.com)*

*For more information, please contact the author of this article:*

*FENG, Chunshi: Ph.D., Partner, Manager, Senior Patent Attorney: [ltbj@lungtin.com](mailto:ltbj@lungtin.com)*



**FENG, Chunshi**  
Ph.D., Partner,  
Manager, Senior  
Patent Attorney

Dr. Chunshi FENG is experienced in patent filing, office action responding, reexamination, invalidation, patent administrative litigation, patent analysis etc., and he focuses mainly in patent cases in technical areas of computer software and hardware, electrical and electronics, automation, mechanics, motor vehicle etc. Since January 2009, Dr. FENG has handled 1000+ patent cases on behalf of clients from China and abroad.



18th Floor, Tower B, Grand Place, No 5, Huizhong Road,  
Chaoyang District, Beijing 100101, P. R. China

Tel: 0086-10-84891188 Fax: 0086-10-84891189

Email: [LTBJ@lungtin.com](mailto:LTBJ@lungtin.com) Web: [www.lungtin.com](http://www.lungtin.com)