

Patent Practice Tips: Rebuttal to the Examiner's Reliance on Asserted Obvious Facts or Common Knowledge

Non-obviousness, or inventive step or inventiveness, ensures that an invention constitutes a sufficient advance in technology to warrant an exclusive right. Given the flexibility in interpretation, the application of non-obviousness has varied greatly among different jurisdictions.

Prosecuting a patent application before the State Intellectual Property Office of China ("SIPO") can be frustrating when an Examiner takes official notice of "Obvious" facts not in the record or relies on "Common Knowledge" without evidentiary support in making a rejection for lack of inventiveness. How to respond to such a rejection? This article introduces SIPO practice and provides practical tips to applicants and practitioners.

A three-step approach

At present in China, inventive step is evaluated mainly based on a so-called "three-step approach," [1] i.e., (i) determining a closest prior art; (ii) determining a distinguishing feature and based on the distinguishing feature, constructing a technical problem the claimed invention actually aims to solve; and (iii) deciding whether the claimed invention is non-obvious to those skilled in the art.

The "three-step approach" is easy to practice in evaluating inventive step of a claim. However, it introduces subjective factors in deciding the nonobviousness, and tends to underestimate the inventive step of a claimed invention, since an Examiner tends to underestimate the inventive step of the claimed invention when s/he already knows about the technical solution of the claimed invention and tends to make an "Ex Post Facto" mistake. In this article, with reference to some successful cases, we will discuss some strategies to rebut the "Obvious" facts and "Common Knowledge" asserted in Examination Opinions.

Recommended rebuttal strategies

While the determination of inventiveness is dependent on the facts of each case, in view of the afore-mentioned three-step approach, we found that most arguments to rebut a lack-of-inventiveness rejection, in particular to rebut the "Obvious" facts and "Common Knowledge" asserted in an Examination Opinion, would focus on:

1. *Challenging the Examiner's determination of disclosed features in a closest prior art reference.*

In most cases, the choice of the closest prior art is undisputable. However, the Examiner's determination of a distinguishing feature may lack of comprehensive understanding of a claimed invention and the closest prior art. The court [2] has made it clear that only a feature performed

the same function as the claimed feature would be deemed to be disclosed in the prior art. To this end, the prior art must be read as a whole to include all explicit and implicit teachings.

In practice, it is often the case that the claimed invention and the closest prior art do not explicitly disclose every specific technical functions of the various technical features. In this case, the technical functions should be read carefully out of the lines.

For instance, a claimed invention is directed to a liquid crystal display device having a technical feature of "a support rib having a light shielding effect." The Examiner asserted that a support frame in a closest prior art corresponds to the support rib of the claimed invention. The Examiner further pointed out that, although it is not explicitly mentioned in the prior art that the support frame can shield light, it would have been readily obvious to those skilled in the art to use a support frame to shield light.

To respond to this Examination Opinion, our attorney carefully studied the closest prior art and found that the support frame in the art actually functions as a support substrate to secure a surface light source element to a backlight source. The prior art did not disclose "the support frame can shield light," rather it provided in the description that "the brightness at the boundary of the support frame becomes high and light leakage occurs there," which means that the support frame of the closet prior art has a completely different function from that of the shielding rib of the claimed invention which has a light-shielding effect.

By further comparing the claimed invention and the closet prior art, it has been found that the reason for the support rib and the support frame functioning differently lies in that the support rib is disposed relative to the light source in the claimed invention differently from the support frame in the closet prior art. Accordingly, in a response to the Examination Opinion, the applicant amended the independent claim by

adding a feature of the relative position of the support rib to the light source, and argued that the support rib has a different structure and thus a different function from the support frame in the prior art. The Examiner accepted this argument and the application was allowed.

2. Considering the construction of a technical problem the claimed invention actually aims to solve, and challenging the Examiner's conclusion of lack-of-inventiveness.

Once the distinguishing feature(s) have been determined, a technical problem that the claimed invention objectively aims to solve must be reformulated (if not presented as "the problem" in the application) based on the distinguishing feature(s), which may lead to a conclusion that there were nonobvious ways to achieve that objectives. The Chinese patent examination guidelines specify that, "as a principle, any technical effect of an invention may be used as the basis to re-determine the technical problem". [3] In other words, the "technical problem" should be interpreted broadly and should be solved by all features encompassed within the claimed solution.

In practice, the Examiner often simply takes the effect of the distinguishing feature per se as the technical problem actually solved by the claimed invention. The applicant or patent attorneys should not agree with such technical problem constructed by the Examiner, but re-construct a technical problem actually solved by the claimed invention over the closest prior art, based on the overall technical effect brought by the distinguishing feature to the overall technical solution.

For instance, a claimed invention is directed to an apparatus for drilling a borehole. The claimed invention only has one distinguishing feature over the closest prior art in that the claim recites at least one insulator member which is positioned on the drill string between a plurality of distance measuring devices, and the at least one insulator member is operable to make non-conductive contact with the formation. The Examiner asserted that, when the closest prior art already discloses a plurality of distance measuring devices on a drill string, in order to allow the plurality of distance measuring devices contact the formation and transmit electromagnetic signals to the surface for distance measurement while avoiding undesirable electromagnetic signal interference, it would have been obvious for those skilled in the art to contemplate at least one insulator member disposed between the plurality of distance measuring devices and that at least one insulator member being in non-conductive contact with the formation.

Here, the technical problem reformulated by

the Examiner was only based on the effect of the distinguishing feature per se, but overlooked the technical effect brought by the distinguishing feature to the whole technical solution. In this case, our patent attorney firstly argued that from the description, the technical problem the claimed invention aims to solve should be "the undesired electrical contact between the drill string and the formation between the distance measuring devices may short-circuit the distance measuring system, and the ability of the distance measuring devices to transmit and receive electromagnetic signals may be influenced."

After the reconstruction of this technical problem, our attorney further pointed out that it would have not been obvious to one skilled in the art to solve the problem by the claimed invention, because "to solve this technical problem, to obtain the technical solution of providing at least one insulator member on the drill string between a plurality of distance measuring devices, and operable to make non-conductive contact with the formation, it has to be considered whether or not an insulator member can be used between the drill string and the formation, whether the insulator member will affect the normal operation of the distance measuring devices, especially when the drill string is very long, whether the non-conductive contact of the insulator member can be properly controlled, whether or not it is possible to use a plurality of insulator members rather than one insulator member, and how to arrange the insulator member to obtain the effect of non-conductive contact without affecting the normal operation of the distance measuring devices". The Examiner was convinced by these arguments and the application was allowed a patent right.

3. Challenging the appropriateness of asserting the "Obvious" facts and "Common Knowledge" in Examination Opinions, and providing arguments and evidences showing nonobviousness.

While setting forth a rejection, an Examiner has an initial burden, after making appropriate findings of facts, to provide a reasoned explanation as to why the invention as claimed would have been obvious to a person of ordinary skill in the art at the time of the invention, where the Examiner may properly rely on intangible realities such as common sense and ordinary ingenuity. However, the legal principle requires the Examiner to step backward in time and into the shoes worn by the hypothetical "a skilled person in the art" when the invention was unknown and just before it was made. The tendency to resort to "hindsight" based upon applicant's application is often difficult to avoid due to the very nature of the examination process. But, impermissible hindsight must be avoided and

the legal conclusion must be reached on the basis of facts gleaned from the prior art. In this regard, citing the "Obvious" facts and "Common Knowledge" without documentary support in Examination Opinions would not be appropriate if the distinguishing feature as obvious and common has been the inventor's major contribution to the art.

Nevertheless, arguing the inappropriateness might not shift the applicant's burden of showing inventiveness, and thus we recommend applicants and patent attorneys providing rationales and evidences on how the invention as claimed would have been inventive to one skilled in the art. The rationales may be in a reference, or reasoned from knowledge in the art, scientific principles, art-recognized difficulties, or even legal precedent. Evidences may be a contradictory teaching in a reference, indicators of inventiveness (such as surprising technical advantage, unexpected technical effects, long felt need or commercial success derived from the technical features of the claimed invention and not some extraneous factors. See the Supreme People's Court (2012) No. 8).

In general, post-filing date evidence would not be considered. Indeed, to do otherwise would imply that the recognition of a claimed subject-matter as a solution to a particular problem could vary as time went by. However,

when a supplementary post-filing date evidence be taken into consideration, the definition of an invention as being a contribution to the art, i.e., as solving a technical problem, requires that it is at least made plausible by the disclosure in the application that its teaching solves indeed the problem it purports to solve. In the Supreme People's Court ((2011) No. 8), the Court stated that evidences were unacceptable and could not be considered for assessing inventiveness if the technical effect relied upon had not been disclosed and verified by experimental data in the documents as originally filed.

In conclusion, non-obviousness, or inventive step or inventiveness, ensures that an invention constitutes a sufficient advance in technology to warrant an exclusive right. The bottom line for arguing the inventiveness of a claimed invention is the properness of the claim breath in view of the inventor's contribution to the prior art.

[1] See, SIPO, 3.2.1.1. Section 4, Part II of Patent Examination Guidelines 2010

[2] See. e.g., the Supreme People's Court (2012) No.3

[3] See also, SIPO, 3.2.1.1. Section 4, Part II of Patent Examination Guidelines 2010

The newsletter is not intended to constitute legal advice. Special legal advice should be taken before acting on any of the topics addressed here.

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