



Inventive Step at the EPO

When assessing an invention for inventive step, an Examiner at the European Patent Office considers whether it would be obvious to a skilled person in view of what was in the public domain before the patent application was filed. There is no standard definition of “obvious” in European patent law. Rather, whether or not an invention is obvious is assessed using the problem and solution approach. This approach is used at all levels of procedure at the EPO, from examination through to opposition and appeal. It is intended to provide a structured and consistent approach to assessing inventive step.

Who is the skilled person?

The skilled person:

- is not a real person, but an imaginary person who is an ordinary skilled practitioner in the relevant field of technology;
- has only average knowledge and ability;
- would be aware of what is considered common general knowledge in the field; and
- does not have any ingenuity or inventive capability.

What is the problem and solution approach?

The problem and solution approach can be divided into five main steps, as outlined below:

1. Identify the closest prior art

The closest prior art is a single prior disclosure considered, from the point of view of the skilled person, to be the most promising starting point for further development. The primary consideration for selecting the closest prior art is that it is directed to the same or similar purpose as the claimed invention or is from a closely related technical field. A secondary consideration is that it has the most relevant features in common with the claimed invention, and therefore requires a minimum number of modifications.

2. Find differences between the closest prior art and the invention as claimed

In this step, the differences between the closest prior art and the claimed invention are determined. These differences are the features which establish novelty of the invention over the closest prior art.

3. Identify the technical effect resulting from those differences

The existence of a technical effect is an essential ingredient for inventive step and while there is no concrete definition for what makes an effect technical, there is a vast amount of case law on the topic. It can be helpful to consider a technical effect to mean a real-world effect that arises as a direct result of the technical features of the claimed invention. This could relate to the advantages associated with the novel features of the invention, or it could be that the invention provides an alternative way of achieving the same effect as is provided by the closest prior art. In any case, the technical effect must be derivable from the application as filed and must be technical in nature.

Novel, non-technical features (e.g., those excluded from patentability) are ignored when assessing inventive step if they do not contribute to producing a technical effect which serves a technical purpose. When a claimed invention has a mix of technical and non-technical features, the non-technical features are not considered for assessing inventive step. This can happen in instances where a feature only contributes to the solution of a non-technical problem, e.g., one that is excluded from patentability.

4. Determine the objective technical problem to be solved

The objective technical problem (OTP) is the problem solved by the technical effect resulting from the differences between the claimed invention and the closest prior art. The problem does not have to be explicitly mentioned in the application and can be reformulated based on the closest prior art. The problem is formulated in such a way that it does not contain any pointers to the solution. This is because any hint towards the solution would involve hindsight in the analysis, which is not allowed. The objective technical problem does not necessarily have to be an improvement over the closest prior art; it could be to seek an alternative to a known apparatus or process which provides a similar effect or is more cost-effective.

5. Consider whether the claimed invention, when starting from the closest prior art and the objective technical problem, would have been obvious to the person skilled in the art

The final step considers whether there is any teaching in the prior art as a whole that would have prompted the skilled person, when faced with the objective technical problem, to modify or adapt the closest prior art to arrive at something falling within the scope of the claimed invention. If so, the claimed invention is considered obvious.

This must be considered in the eyes of the skilled person. The skilled person can only follow a logical progression from the closest prior art when seeking a solution to the objective technical problem. They cannot use any ingenuity or inventive thinking at all. They only possess the competence to undertake routine work and experimentation or follow any hints or suggestions contained in the closest prior art. So, any development or modification which follows logically from the prior art would be considered obvious to the skilled person.

The skilled person can consider and combine two or more prior art disclosures if there is a reasonable basis that they could and would associate these disclosures with one another when faced with the OTP. For example, the skilled person would usually associate a prior art document with a well-known or standard textbook in the relevant field. They would also associate two disclosures if in one disclosure there is a clear reference to the other. The skilled person is unlikely to combine two disclosures if there is an inherent incompatibility between disclosed features which are essential to the claimed invention.

It is important to consider not whether the skilled person merely could have arrived at the invention by modifying the prior art, but that they would have arrived at the invention in the expectation of some improvement or advantage. The skilled person must have a reasonable

expectation of solving the problem in the manner as claimed when modifying the prior art.

Secondary Indicia

There are also some additional considerations, known as secondary indicia, which may sometimes be taken into account when assessing inventive step. It is important to note that these are merely auxiliary indicators for the presence of an inventive step and are not prescriptive.

If the technical effect achieved by the claimed invention is surprising or unexpected, it is less likely that the claimed invention will be considered obvious. Similarly, if there is a technical prejudice preventing the skilled person from developing towards the claimed invention, the claimed invention may be more likely to be inventive.

The claimed invention might present a foreseeable disadvantage or worsening of the closest prior art. Unless this disadvantage also results in an unexpected technical advantage, the invention is unlikely to be inventive.

There may also be commercial indicators for inventive step. For example, if the claimed invention solves a long-standing problem in the relevant technical field, it may be considered to be inventive. Evidence of commercial success may also be seen to indicate the presence of an inventive step, but only when it is combined with evidence of a long-felt need and only if the commercial success is derived from the technical features of the invention, rather than from other commercial aspects, such as marketing.

While the problem and solution approach is used by the EPO, patent offices in other jurisdictions may use different methods to assess inventive step. An understanding of these methods can provide both applicants and third parties with a degree of confidence about whether a claim will be found to be inventive. At HLK, we can carry out patentability assessments of your ideas and validity assessments of your competitor's patents to help inform your commercial decisions.

This is for general information only and does not constitute legal advice. Should you require advice on this or any other topic then please contact hlk@hlk-ip.com or your usual HLK advisor.