

having already searched part of the subject-matter, was still not in a position to identify several separate inventions.

Following the Enlarged Board's conclusions in G 1/89 and G 2/89, the boards repeatedly used a lack of novelty or inventive step in the general inventive concept underlying the invention to justify a finding of lack of unity (see W 17/89, W 27/89, W 18/90 and W 19/90). In W 10/92 the board stressed that the problem-solution approach was to be applied to unity of invention (W 16/91, W 21/91).

In W 17/03 the ISA had considered that the absence of common technical features and an allegedly different problem solved would be sufficient to demonstrate lack of unity between groups of inventions. The board suggested that the ISA's approach to the determination of the problem appeared to stem from the belief that what was required was the same analysis as that used to determine the problem when using the problem and solution approach to evaluate inventive step, possibly because differences and problems are involved in both situations. The board stated that it was not convinced that the investigation of technical relationships for unity with the aid of common problems underlying the inventions is necessarily the same as the analysis that is used to determine the problem when using the problem and solution approach to evaluate inventive step. The board gave the following reasons:

(1) The evaluation of unity involves comparing problems solved (or effects achieved) by different claims, whereas the evaluation of inventive step is carried out on a single claim. As a result, when examining unity, the problems solved by different claims must be considered in the light of each other and cannot be determined in isolation in an absolute sense.

(2) In the evaluation of inventive step, the idea is to define a problem based on the distinguishing features that is essentially as narrow as possible, but not involving elements of the solution. On the other hand, in the evaluation of unity, these restrictions do not apply, since the overall object is to find out what the claims involved have in common, i.e. if the respective inventions are so linked as to form a single general inventive concept.

Thus, the specific problems solved by the different inventions with respect to the closest prior art might need gradual refinement, in particular generalisation starting from the problem directly solved, to find out whether or not there was a common denominator that still distinguished the inventions from the said prior art.

5. The single general inventive concept

5.1. General

When deciding on unity of invention, it is mandatory under Art. 82, R. 44 EPC and under R. 13.1 PCT to determine whether or not a group of inventions claimed in an application forms a single general inventive concept.