

In W 19/89 the board decided that the application clearly lacked unity of invention, since the four possibilities comprised by claim 1 related to a further development of the state of the art in different directions, namely by employing different classes of dehalogenation agents having no new technical feature in common. Where at least one solution of the underlying technical problem already formed part of the state of the art, the requirement of a "single general inventive concept" implied that the further solutions to that problem proposed in the application must have at least one new element in common, this new element being normally represented by at least one new technical feature. Since the absence of such a unifying new technical feature was admitted by the applicant, the application related to more than one invention.

A useful analysis of the single general concept was made in W 6/90 (OJ 1991, 438). The board found that this concept manifested itself in features common to different teachings expounded individually in the same application. It observed that a teaching for the purposes of patent law encompassed not only the immediate subject-matter representing the solution to the problem as defined in the relevant claim, but also its technical consequences which were expressed as effects. It was noted that any subject-matter was defined by structural features and the relationship between them. The relevant effects, i.e. the outcome or results achieved by the invention as claimed, would usually already be apparent from the problem as stated. A single general concept might therefore be said to be present only if a partial identity existed between the teachings in an application deriving from the structural features of the subject-matters claimed and/or the outcome or results associated with those subject-matters.

Where subject-matters of the same category were concerned, a partial identity, generating unity of invention, could result from the structural features of these subject-matters and/or their associated effects. The absence of such an element common to all the different teachings in the application, and hence a lack of unity, might be established a priori under certain circumstances. A lack of unity might, however, also be established a posteriori between the subject-matters of different independent claims or in the remaining subject-matters if the subject-matter of a linking claim was clearly not novel or inventive vis-à-vis the state of the art. The board gave an example of what was meant by the abstract term "single general concept": a product, a process specially adapted for the manufacture of the said product, and a use of the said product, for example, embodied a single general concept because, on the one hand, the partial identity between the product and its use derived from the structural features of the product and, on the other hand, the partial identity shared by the product and the process specially adapted for its manufacture also derived from the product which was to be considered as the effect or result of this process (see T 119/82, OJ 1984, 217).

The board also noted that the criteria governing unity of invention for the purposes of R 13.1 PCT elucidated above also applied in principle where the inventive step was based chiefly on the discovery of an unrecognised problem (see T 2/83, OJ 1984, 265). If the common problem, i.e. the effects to be achieved, was itself already known or could be recognised as generally desirable (a mere desideratum) or obvious, there would be no inventive merit in formulating the problem. If the common structural features were to be