In **T 406/98** the board found that as a rule, particularly when large numbers of citations were involved, it was necessary to ask **why** the skilled person would consider documents in that specific combination, and whether, **not knowing the invention**, he had reason to do so. In this case, a complete solution to the problem required deliberate selection from a large number of citations.

In **T 55/93** the appellant's argument that the alleged invention should have been regarded as a mere aggregation of solutions of two independent partial problems which were not interrelated, was not accepted by the board. This reasoning could only stand if the primary and more general problem were already known and solved by the prior art. In the case in point, not only could the primary problem underlying the contested patent neither be found nor be derived from the prior art documents, but also the claimed features complemented each other. The board stated that the features were functionally linked together, which was the very characteristic of a combination invention. The board stated it was no consequence whether, in a combination invention, possibly all features were already known per se, separately (**T 37/85**, OJ 1988, 86). It was wrong to select on the basis of a plurality of partial problems to be solved, the respective constructional means used in the apparatus combination, or the steps of the method worded in terms of functional features, which by working together provided a solution to the problem taken as a whole. The non-obviousness of a combination claim turned on the simultaneous application of all its features (**T 175/84**, OJ 1989, 71). A combination effect was also acknowledged in **T 120/88**, **T 731/94**, **T 434/95**, **T 897/95**, **T 1201/13**.

9.3.2 Partial problems

In patent law terms, the existence of a combination of features, i.e. of a combination invention, is to be viewed differently from the mere existence of partial problems, i.e. of an aggregation of features. According to current case law, partial problems exist if the features or sets of features of a claim are a mere aggregation of these features or sets of features (juxtaposition or collocation) which are not **functionally interdependent**, i.e. do not mutually influence each other to achieve a technical success over and above the sum of their respective individual effects, in contrast to what is assumed in the case of a combination of features. What has to be established is whether each set of features is separately obvious in the light of the prior art (**T 389/86**, OJ 1988, 87; **T 387/87**; **T 294/90**; **T 363/94**; **T 926/11**; **T 1587/14**). It should also be borne in mind that solutions to partial problems in differing technical fields must be assessed on the basis of the knowledge and expertise of the person skilled in the art where the solution is found (**T 32/81**, OJ 1982, 225; **T 324/94**).

In **T 389/86** (OJ 1988, 87) the relationship between the two groups of features was not one of functional reciprocity. The board ruled that in such circumstances no combinative effect could be advanced in support of inventive step; rather the question was whether each group, taken singly, was obviously derivable from the prior art. For the subject-matter of the claim to be inventive, it sufficed if one of these groups was (see also **T 345/90**, **T 701/91**, **T 94/05**, **T 450/06**, **T 102/08**, **T 619/08**, **T 2097/10**).