

Recherche) for the compositions and the optical properties of the glass bottles all fell within the ranges defined in claim 1 of the patent in suit and that the results of the analyses were in sufficient agreement with each other to be reliable.

b) Evaluation of tests cited to prove that problem solved (Art. 56 EPC)

In T 1872/08 which concerned inventive step and the non-obvious solution of a problem based on an advantageous effect demonstrated by means of comparative tests, the Opposition Division had not deemed the tests provided by the applicant (appellant) to be relevant because the tests had been made with one specific printer on one specific paper, both different from the paper and the printer used in example 18 of document (D9). The board stated that, according to the established jurisprudence of the boards of appeal, "in the case where comparative tests are chosen to demonstrate an inventive step with an improved effect over a claimed area, the nature of the comparison with the closest state of the art must be such that **the effect** is convincingly shown to have its **origin in the distinguishing feature of the invention**. For this purpose it may be necessary to modify the elements of comparison so that they differ only by such a distinguishing feature ..." (T 197/86, OJ 1989, 371, point 6.1.3 of the Reasons). The board concluded in T 1872/08 that the comparative tests provided sufficient evidence that the problem was solved. –

In T 479/06 the board found that tests results cited by the proprietor to show that the problem was solved by the claimed solution and so established inventive step were **not conclusive**. It could not conclude on that basis that the technical problem had actually been solved, so the technical problem had to be redefined. (For another example, see T 1177/17, in which, because the respondent had not substantiated its submissions with any evidence other than the data reported in example 1 of the patent, a study in mice vaccinated with Influvac, the technical effect was not plausible, and so the effects were not taken into account in the formulation of the objective technical problem.)

In T 568/11 the board stated that the technical problem needed to be reformulated. One of the arguments of the patent proprietor was that the additional differences between the compositions to be compared were so minimal that they would have no influence on the properties of the composition.

Concerning also an effect not **attributable to** the distinguishing of feature, in T 71/09, the mere comparison of the two compositions was insufficient to demonstrate that the alleged effect had been caused by the claimed solution or that this effect had been produced across the entire claimed area. Indeed, the improved resistance of hair dye to shampoos might **be caused by other factors**. Improved durability of hair dye had not been established for all the claimed compositions.

In T 1127/10 (hair treatment), since there was no experimental data in any of the examples in the patent, the appellant had submitted a document reporting on two series of comparative tests. The board, however, found that the document's description of the test procedure and analysis of the results were deficient and insufficiently informative to demonstrate plausibly that such an improvement had been achieved (see also T 1962/12 and T 383/13: comparative examples deficient – improvement not plausibly