

prepared for the first time and had done so inventively and other methods of preparing it had appeared to be ruled out.

In T. 648/88 (OJ 1991, 292) the board disagreed with the view expressed in T. 163/84, pursuing instead the line taken in T. 22/82. An intermediate intended for the preparation of a known end-product was deemed to be inventive if its preparation took place in connection with inventive preparation or inventive further processing or in the course of an inventive complete process (confirmed in T. 1239/01).

In T. 65/82 (OJ 1983, 327) it was explained that new intermediates which take part in (non-inventive) analogy processes for sequent products (i.e. end products or intermediates of various kinds), must – in order to qualify as intermediates – provide a structural contribution to the subsequent products. Even where this condition was met, such intermediates were not thereby unconditionally inventive, i.e. not without taking the state of the art into consideration. As state of the art in relation to intermediates there are two different areas to be taken into account. One is the "close-to-the-intermediate" state of the art. These are all compounds identified from their chemical composition as lying close to the intermediates. On the other hand the "close-to-the-product" state of the art must also be taken into account, i.e. those compounds identified from their chemical composition as lying close to the subsequent products. With respect to the **"close-to-the intermediate" state of the art**, the question was whether or not the skilled man could have deduced from it the need to carry out certain purposive modifications to known compounds in order to obtain that intermediate which alone could enable him to solve the problem of making the subsequent products by means of a specific analogy process. With respect to the **"close-to-the product" state of the art**, a further question then was whether or not the skilled man could have derived from it the claimed intermediate in an obvious fashion.

In T. 18/88 (OJ 1992, 107) the applicants had argued that the insecticidal activity of the known end products was significantly superior to that of another known insecticide with a similar structure; this was sufficient to establish an inventive step for the intermediate products, even if the end products were not novel and/or inventive. The board, referring to T. 65/82 (OJ 1983, 327), rejected the applicants' argument on the following grounds: claimed intermediates must themselves be based on an inventive step to be patentable. Whether, under certain circumstances, new and inventive subsequent products might support an inventive step of intermediates was not the question here, because the subsequent products in this case were either not novel or not inventive. The superior effect of subsequent products which were neither novel nor inventive was not sufficient to render the intermediates inventive (T. 697/96, T. 51/98).

9.9.5 Predictable improvements resulting from amorphous forms as compared to crystalline forms

In T. 777/08 (OJ 2011, 633) the claims in question related to a particular polymorph (form IV) of crystalline atorvastatin hydrate. The board found that the skilled person in the field of pharmaceutical drug development would have been aware of the fact that instances of polymorphism were commonplace in molecules of interest to the pharmaceutical industry, and would have known it to be advisable to screen for polymorphs early on in the drug