

the copolymers in accordance with the second definition of the CDBI which did not belong to the group of polymers in accordance with the first definition of CDBI. The subject-matter of claim 1 has not been shown to be enabled in the whole range claimed, and the main request was refused (Art. 100(b) EPC).

In T 482/09 (viscosity) the boards held that, in opposition and any ensuing appeal proceedings, the result of using such an indefinite term in a claim was that it could not be taken to determine the limits to the protection sought, so that novelty and inventive step had to be assessed in the light of the prior art identified on the basis of all its technically meaningful possible interpretations. If the term had no specific meaning whatsoever, it would even lose entirely its effect of delimiting the claimed subject-matter from the relevant prior art.

5.5.2 Open-ended parameter features

In T 1697/12 the claims covered, through open-ended ranges, embodiments that could not be obtained with the process disclosed in the patent, but which might be obtainable with different methods still to be invented in the future (insufficiently disclosed invention). Related decisions: T 61/14 (point 5 of the Reasons, along the same lines, range not achievable over whole scope), T 2344/12 (point 1.1.2 of the Reasons, along the same lines, open ended range not sufficiently disclosed), T 517/98 (point 1.5 of the Reasons, similar, no teaching for whole range), T 615/19 (point 1.2 of the Reasons, conclusions of T 1697/12 not applicable, implicit limitation of open-ended range due to the existence of other features) and T 398/19, summarised below, in which the board rejected objections to **open-ended ranges** starting with "at least ..." or "at most ..." which the opponent had raised in relation to preparation methods that were still to be invented, invoking T 1697/12 and T 113/19 and the German Federal Court of Justice's decisions X ZR 32/17 and X ZR 34/17 in support of its arguments.

The decision in T 398/19 contains detailed reasons on the issue of a parameter defined by open-ended ranges. The opponent had objected to open-ended ranges of the kind starting with "at least ..." or "at most ...", alleging that they were not sufficiently disclosed. The board observed that the sole fact that certain features were expressed in terms of open-ended ranges was not enough to support an objection of insufficient disclosure, especially where, as in the case in hand, the description and the examples contained precise information on how to prepare one or more specific products having all the claimed features. Besides, it was common practice in the technical field concerned to characterise a product in terms of open-ended ranges and the claimed subject-matter often omitted parameters equally important for the claimed product's efficacy. Defining a product by all its structural parameters would clearly be impossible, and indeed often unnecessary in view of the invention's purpose. Lastly, the board observed that defining a parameter by an open-ended range by no means precluded the later invention of new methods whereby parameters having values very far from those claimed and so likewise patentable could be obtained. The board found that the requirements of Art. 83 EPC were met, endorsing the findings in T 113/19, T 1018/05 and T 624/08, and holding T 1697/12 to be inapplicable to the case in hand.