Cf. **T 1900/17** (fabric conditioners – use of a calculated partition coefficient such as ClogP for selecting nonionics – thorough discussion of whether ClogP was an unusual parameter).

6. Reproducibility

6.1. Repeatability

In **T 281/86** (OJ 1989, 202), it was held that there is no requirement under Art. 83 EPC 1973 according to which a specifically described example of a process must be exactly repeatable. Variations in the constitution of an agent used in a process are immaterial to the sufficiency of the disclosure provided the claimed process reliably leads to the desired products. See also **T 292/85** (OJ 1989, 275); **T 299/86** (OJ 1988, 88); **T 181/87**, **T 212/88** (OJ 1992, 28); **T 182/89** (OJ 1991, 391) and **T 19/90** (OJ 1990, 476).

In **G 1/03** (point 2.5 of the Reasons) the Enlarged Board of Appeal indicated that a lack of reproducibility of the claimed invention is relevant under the requirements of sufficiency of disclosure if the technical effect is a technical feature of the claim, since then it is a feature characterising the subject-matter claimed (**T 1079/08**). A lack of reproducibility of the claimed invention (i.e. a failure of the claimed features to deliver the effect aimed for) is seen to represent, in the case of an effect which is not expressed in a claim but is part of the problem to be solved, "a problem of inventive step". If an effect is expressed in a claim, there is lack of sufficient disclosure (**G 1/03**, OJ, 2004, 413, and **T 939/92**, OJ 1996, 309, cited by **T 2001/12**; and more recently in **T 1845/14**).

According to established case law, the requirement of sufficiency of disclosure of Art. 83 EPC is not met if an effect expressed in the claim cannot be reproduced (summary of the case law in **T 1473/13**; see also **T 1845/14**).

In **T 161/18** the application used an artificial neural network to transform the blood pressure curve measured on the periphery into the equivalent aortic pressure. As regards how the **neural network** according to the invention was trained, the application disclosed only that the input data should cover a wide range of patients differing in age, sex, constitution type, state of health, etc. to prevent the network from becoming specialised. However, it did not disclose what input data were suitable for training the network or even a suitable set of data for solving the technical problem in question. As a result, the skilled person could not reproduce the network's training and so could not carry out the invention. The invention, which was based on automated learning, in particular in connection with an artificial neural network, was thus insufficiently disclosed, because the training it involved could not be reproduced owing to a lack of disclosure in this regard.

6.2. Hypothetical embodiments

In **T 515/00** the board pointed out that an invention cannot be considered to be irreproducible merely because a claim encompasses a hypothetical embodiment which lies outside the breadth of the claim as determined by the Protocol on the Interpretation of Art. 69 EPC 1973, which embodiment cannot be reproduced (endorsed in **T 519/07**).