

In T.208/84 (OJ 1987, 14) the method Claims 1-7 and 12 were directed to methods for digitally processing images. One basic issue to be decided was whether or not such a method was excluded from patentability under Art. 52(2) and (3) EPC 1973 on the ground that it was a mathematical method as such. The board noted that there could be little doubt that any processing operation on an electric signal can be described in mathematical terms. The characteristic of a filter, for example, can be expressed in terms of a mathematical formula. A basic difference between a mathematical method and a technical process can be seen, however, in the fact that a mathematical method or a mathematical algorithm is carried out on numbers (whatever these numbers may represent) and also provides a result also in numerical form, the mathematical method or algorithm being only an abstract concept prescribing how to operate on the numbers. No direct technical result is produced by the method as such. In contrast, if a mathematical method is used in a technical process, that process is carried out on a physical entity (which may be a material object but equally an image stored as an electric signal) by some technical means implementing the method and provides as its result a certain change in that entity. The technical means might include a computer comprising suitable hardware or an appropriately programmed general purpose computer. The board was, therefore, of the opinion that, even if the idea underlying an invention may be considered to reside in a mathematical method, a claim directed to a technical process in which the method is used does not seek protection for the mathematical method as such. In contrast, a "method for digitally filtering data" remains an abstract notion not distinguished from a mathematical method as long as it is not specified what physical entity was represented by the data and it forms the subject of a technical process, i.e. a process which is susceptible of industrial application (see also T.1161/04, T.212/94).

In T.953/94, claim 1 of the main request related to a method of generating with a digital computer a data analysis of the cyclical behaviour of a curve represented by a plurality of plots relating two parameters to one another (use of mathematical method in physical process). The board held that such a method could not be regarded as a patentable invention, because an analysis of the cyclical behaviour of a curve was clearly a mathematical method excluded as such from patentability. The reference to a digital computer only had the effect of indicating that the claimed method was carried out with the aid of a computer, i.e. a programmable general-purpose computer, functioning under the control of a program excluded as such from patentability. The fact that the description disclosed examples in both non-technical and technical fields was confirmation that the problem solved by the claimed mathematical method was independent of any field of application and could thus lie, in the case at issue, only in the mathematical and not in a technical field.

In T.27/97, the appellant (opponent) interpreted the claim to mean that its subject-matter, despite the statement that a method for use in electronic systems was involved, was confined to purely intellectual methods and thus excluded by Art. 52(2)(c) EPC 1973. The board disagreed, ruling that, according to claim 1, the application claimed a method, for use in electronic systems, of encrypting or decrypting a message (represented in the form of a digital word using RSA-type public-key algorithms). So the invention was clearly a method in the computer and telecommunications field and thus not excluded under