g) Image processing

T 208/84 (OJ 1987, 14) was concerned with a method of digitally filtering a two-dimensional data array (representing a stored image). The board noted that a basic difference between a mathematical method and a technical process could be seen in the fact that a mathematical method or a mathematical algorithm was carried out on numbers (whatever those numbers represented) and provided 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 was produced by the method as such. In contrast, if a mathematical method were used in a technical process, that process would be carried out by a technical means on a physical entity (which could be a material object but equally – as here – an image stored as an electrical signal) and would result in a certain change in that entity. The technical means might include computers comprising suitable hardware or appropriately programmed general-purpose computers (as similarly found in **T 935/97**).

In **T 1286/09** the invention related to a method for improving image classification by training a semantic classifier with a set of exemplar colour images, which represented "recomposed versions" of an exemplar image, in order to increase the diversity of training exemplars. The board found that it involved inventive step.

In **T 1455/16** the application related to retrieving images according to user specified arrangement information. The image data memory means was arranged to store position information of the image data, indicating the shooting spot of the image and recommending a shooting spot at which such an image could be captured. The board held that the text of the application did not reflect the application of the position information in a technical task of guiding the user to a point in space. Therefore, it could not be said that in the present case providing position information to a user was based on technical considerations. The mere fact that the position information concerned physical elements in the real world was not sufficient for establishing a technical contribution of providing the position information (**T 154/04**, OJ 2008, 46; **T 2035/11**; **T 670/16**; different in **T 572/15**).

h) Security

In **T 1326/06** the board held that methods of encrypting/decrypting or signing electronic communications had to be regarded as technical methods, even if they were essentially based on mathematical methods. It referred to **T 953/04**, where the board had stated that the use of cryptographic methods in the technical context of electronic data processing and communication certainly had technical character. The board in **T 1326/06** also referred to **T 27/97**, where the board had stated that a method of encrypting or decrypting a message represented in the form of a digital word using RSA-type public-key algorithms was not excluded from patentability under Art. 52(2) and (3) EPC, even if based on an abstract algorithm or mathematical method.

In **T 2101/12** the application related to a computer implemented invention concerning a method and system for providing an electronic signature and authentication. The board considered it common general knowledge that documents, such as a will or a contract