

In T.541/96 the gist of the invention consisted in inducing nuclear fusion between light nuclei and heavy unstable nuclei at low temperature by means of an electric field. The board held that an invention or an application for a patent on an alleged invention which was incompatible with the generally accepted laws of physics did not meet the requirements of Art. 57 and 83 EPC 1973, because it could not be used and therefore lacked industrial application.

The EPC did not exclude "revolutionary" inventions from being patented. However, Art. 83 EPC 1973 made the amount of information required for a sufficient disclosure of an invention somewhat dependent on the actual "nature" of the invention. However, if the invention seemed, at least at first, to offend against the generally accepted laws of physics and established theories, the disclosure should be detailed enough to prove to a skilled person conversant with mainstream science and technology that the invention was indeed feasible (i.e. susceptible of industrial application). This implied, inter alia, the provision of all the data which the skilled person would need to carry out the claimed invention, since such a person, not being able to derive such data from any generally accepted theory, could not be expected to implement the teaching of the invention just by trial and error.

The appellant had provided neither experimental evidence nor any firm theoretical basis which would enable the skilled person to assess the viability of the invention; the description was essentially based on general statements and speculations which were not apt to provide a clear and exhaustive technical teaching. Thus, it was irrelevant to consider whether the fusion reactions referred to in the description might be theoretically possible, or whether they might indeed occur under certain conditions.

### **3. Indication of a profitable use of the invention in industry**

R. 42(1)(f) EPC (former R. 27(1)(f) EPC 1973) prescribes that the description should "indicate explicitly, when it is not obvious from the description or nature of the invention, the way in which the invention is industrially applicable".

In T. 1452/06 the board stated that a basic principle of the patent system was that exclusive rights could only be granted in exchange for a full disclosure of the invention, which included the need to indicate how to exploit the invention (Art. 57 EPC 1973). This indication must have "a sound and concrete technical basis", as a "speculative indication of possible objectives that might or might not be achievable by carrying out further research with the tool as described was not sufficient to fulfil the requirement of industrial applicability" (see T. 898/05, T. 870/04 and T. 1109/10).

In T. 898/05 the board found that for the purposes of Art. 57 EPC 1973, a claimed invention had to have such a sound and concrete technical basis that the skilled person could recognise that its contribution to the art could lead to practical exploitation in industry. The board explained that while industrial applicability should be construed broadly, to include any "immediate concrete benefit", this also entailed the need to disclose in definite technical terms the purpose of the invention and how it could be used in industrial practice to solve a given technical problem, this being the actual benefit or advantage of exploiting the invention. There had to be at least a prospect of a real as opposed to a purely