

VI. Conclusions

Patenting nanotechnological inventions under the EPC may represent some particularities not existing in other fields. This distinctiveness is based on the complex and multidisciplinary nature of the technology, its creation process intimately related to the development of scientific principles and the application of patent law provisions that were developed to deal with more simple inventions.

This Thesis has attempted to cover a list of issues identified as significant for the application of the EPC provisions to nanotechnology and nanoscience. Due to the newness of the field and the absence of a critical mass of cases dealing specifically with nanotechnology, this approach has been made by the analysis of EPO decisions on the application of patentability requirements in other complex technological fields such as biotechnology and chemistry. In implementing the reasoning used in such cases similarities in the challenges faced when patent law was applied in those fields and the problems of today with nanotechnology were identified. In most of the situations, from problems related to patentable subject matter to novelty and inventive step requirements, corresponding cases in other fields assisted in clarifying the uncertainties generated by nanotechnological innovations. No particular problems were found in connection with the need to develop extra pieces of law, and almost all the issues covered by the analysis were answered with existing patent provisions and jurisprudence.

Most complexities related to patenting of nanotechnological inventions are susceptible to be solved by a good, precise and careful drafting of the set of patent claims and the invention description. This practice allows not only to work out problems related to rejections based on subject matter eligible to be patented or to pass the disclosure requirement, but also to avoid later invalidations based on inherence or unknown prior art.

Even so, some problems have been identified in two specific topics. The first area is related to the exclusion from patentability of some basic knowledge developed during the research process. In this regard we found that patenting nanotechnological inventions at an early stage of development could be difficult in terms of fulfilling requirements related to disclosure and industrial applicability. The second area is related to the scope of rights granted by a patent. It was shown that limiting the scope of patents protecting nanotechnological inventions to the specific use or uses described in the specification may improve the correspondence between the scope of the invention and the scope of rights granted by the patent. From this it was concluded that this would contribute to development of a more certain scenario for users of nanotechnological inventions and for patent right owners in terms of enforceability and freedom to use.

