

Abstract

European legal regulation of patents in the area of science and research

Bioethics is an important part of law regulation in the medical field. According to the current state, bioethics is able to highlight main issues, which are connected with medical research and suggest possible solutions. This paper combines two controversial topics. First one is human embryonic stem cell research and second one is research on nanoparticles and indicates Intellectual Property Law possibilities in this field. Paper is divided into two parts. First one deals with the legal regulation on research on embryo in the Czech Republic and in other states of The Western Europe. Main focus is based on patentability of research concerned with the human embryonic stem cells, which might have a great therapeutic potential but their preparation necessarily leads to the destruction of “human embryos”. (HESC) Main concern is connected with regard to the European law and the current groundbreaking judgement, *Brüstle v. Greenpeace eV*. In mentioned judgment European Court of Justice held that after interpretation of the Directive on the legal protection of biotechnological inventions, it will not be able to grant a patent on research which led in the destruction of a human embryo. Paper also includes assessment of the attitude of the European Patent Organisation, which is not directly bounded by the decision of the Court of Justice, but is used to respect this kind of for ensuring legal certainty in Europe. Furthermore, the work deals with the legal regulation on patentability and federal funding of human stem cell research in the United States and in the Czech Republic. Second part deals with current legislation on patentability of nanotechnology with main regard to patentability of research on nanomedicine. Main aim of the paper is to evaluate the application of Directive on the legal protection of biotechnological inventions, The European Patent Convention and the TRIPS Agreement on the issue of patentability of nanotechnology with the main focus on the patentability of nanomedicine. Paper also includes Czech National Patent Law. Paper covers definition of nanoparticle and shows particular ongoing medical research on nanoparticles. Paper also includes retrieval on Espacenet and in The Czech Office of Industrial Property on valid European and national patents.