Copyright requirements in the 3D printing industry

Jongweon Kim
Sangmyung University, Korea

Impact of 3D printing technology in the manufacturing industries is getting more powerful since the patents about 3D printers had been expired. As primitive 3D printing technology evolved into the fine printing technology from coarse technology and the printing materials are diversified, its scope of application range was extended from the biotechnology to the automobile industry and aerospace industry. In addition, an ordinary person can print their own ideas by the low-cost 3D printer. Dissemination of accurate 3D scanners and 3D printers makes it easy for someone to steal other people's designs and ideas. Plagiarism and theft on tangible media by a 3D printer raises the piracy issue on intellectual property. Therefore, copyright requirements will be investigated how to be defined for the protection of the work output by the 3D printer. The works should have a minimum of creativity to be protected by the copyright and should have investigate whether those works are based on original works. It is hard to interpret these criteria mechanically, but the determining similarity between original works and printed works can be supported technically. In this study, we want to be able to remove the impediments to the advance of the activation of the 3D printer industry by deriving the requirements for copyright protection of 3D printed works.

Biography

Jongweon Kim received PhD degree from University of Seoul, major in signal processing. He is currently a Professor of Dept. of Contents and Copyright and Chief of Creative Content Labs at Sangmyung University in Korea. He has a lot of practical experiences in the digital signal processing and copyright protection technology in the institutional, the industrial, and academic environments. His research interests are in the areas of copyright protection technology, digital rights management, digital watermarking, and digital forensic marking.

jwkim@smu.ac.kr