Intellectual Property Problems on Photographic **Information Analysis in University Environment**

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Abstract

A necessary condition for career development in educational institutions is the creation of a connection between education, research and practice. A successful step in this direction is made by the University of Library Studies and Information Technologies (ULSIT) in Sofia, Bulgaria, where the PhD Program "Organization and Management of Information Processes" has been developed in the professional field "Public Communications and Information Sciences". University education in Intellectual Property is of crucial importance in various fields of knowledge. Intellectual property research, especially copyright and related rights, is often aimed at the creation or use of commercial products such as audiovisual and performing productions. In particular, it is rarely mentioned copyright on photographic images, because in this area we have huge technological advances that can hardly be presented in any R & D-friendly frameworks. Current conditions and circumstances are such that now almost every person, holding a photographing device, produces a photographic image that can be protected. Photography is an art and business, hobby and profession. When it is created as a result of the creative activity of professionals and possesses artistic character, it becomes an object of copyright protection. In the framework of the abovementioned PhD program "Organization and Management of Information Processes" in ULSIT, intensive research in the field of the intellectual property on photographic information is made. This is a problem that is globally explored but at the same time it is of particular importance for the modern information society, which often handles. advertises and illustrates its business achievements or the daily routine of its individuals through photographic images. The report summarizes some of the most important and innovative results from researches on intellectual property, copyright and related rights, and in particular copyright on photographic images. Specific proposals for future research and their actual application in public practice have been formulated.

Keywords: copyright, intellectual property, R & D, photographic information

1. Introduction

Research on intellectual property (IP), in particular copyright and related rights, is aimed at the so-called creative industries related to audiovisual and stage productions. New technologies also create new perspectives and challenges for science, so

research in this area is of utmost importance to both business and their creators.

The technological advancement of photography in the 1970s and the mass production and use of digital photography at the beginning of the 21st century changed the attitude towards the end product called a photograph because of its specific digital format. Regardless of the photographic image creator's status - professional or amateur, any photographic image that is a result of the author's creative activity and has an artistic character (aesthetic, spatial, compositional, stylistic sense of a work of photography) could be an object of copyright [2, 8].

The purpose of this report is to highlight examples of IP research in copyright and related rights at photographic information, and research has been carried out in various electronic resources such as WorldCat, the National Information and Documentation Center Bulgaria (NIDC), COBISS Platform - Co-operative Online Bibliographic System and Services and Scientific Research Fund at the Ministry of Education and Science of Bulgaria. Research in this area helps to raise the awareness of the whole society on legal issues relating to copyright products.

2. Intellectual Property Training in University Information Environment in Bulgaria

The importance of IP in the modern world goes far beyond the protection of the creations of the mind, as it affects all aspects of economic and cultural life. That is why the question arises, which is of utmost importance for the intellectual property literacy of the society, namely IP education in a university information environment [1, 9, 10]. The theoretical and practical IP training leads to the acquisition of professional knowledge, skills and experience to work with different products, which is a prerequisite for the innovation of the society and the increase of the information literacy [6]. Active participants in the information process are: The World Intellectual Property Organization, the European Patent Organization, the Office of the European Intellectual Property Union.

In Bulgaria, IP education is offered in bachelor and master programs at the University of National and World Economy, the National Academy of Theater and Film Arts, the University of Library Studies and Information Technologies and the New Bulgarian University. After completing a master's degree, students can continue their education in the educational and scientific degree "doctor".

In addition to formal education in a university environment, the focus is also on informal learning and certification of knowledge, through the creation of an appropriate educational structure and environment in/outside educational institutions [6]. Nonformal learning is of interest to the scientific and students' community, exemplary of which are different educational structures and institutes, the organization of scientific seminars and the realization of project and research activities.

3. Research in the IP field on photographic information – examples from international practice

Internationally, studies related to the "copyright on photographic images" are published in information sources such as:

- Encyclopedia Britannica containing a section related to Copyright LAW.
- Copyright and photographs: an international survey by Ysolde Gendreau, Axel Nordemann, Rainer Oesch
- Photographer's legal guide by Carolyn E. Wright
- Photo 1: An Introduction to the Art of Photography by Katie Stern
- Copyright Workflow for Photographers: Protecting, Managing, and Sharing Digital Images by Christopher S. Reed

- Photographer's Survival Manual: A Legal Guide for Artists in the Digital Age (Lark Photography Book), by Edward C. Greenberg and Jack Reznicki
- Photographers at Work: Essential Business and Production Skills for Photographers in Editorial, Design, and Advertising by Martin Evening.

For the purpose of the report, the WorldCat database is also used, resulting in the following examples of world-wide research in the field of photographic copyright:

- Rights and Reproductions? Commercial Photography and Copyright Law in the United States, 1884-1909 By Katherine Brooks Mintie [3]:
- Legal aspects of visual resources archive management: effect of the 1976 Copyright Act and U.S. admission to the Berne Convention (1988) on scholastic collections of photographic materials - by John Stuart Koehler;
- Copyright and photography: digital dilemmas by Michelle L Mitchell;
- The appropriation of photographic images in works of art: legal and aesthetic issues inherent in the conflict between modernism and postmodernism, by Louise Harmon:
- Art, photography, copyright: a history of photographic copyright 1850-1911 by Elena Sophia Christina Cooper;
- A delicate copyright issue: photographing public art by Ae Lee Sin;
- Copyright law and the freedom of panorama: the right to commercialize photographs of protected works: a dissertation submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of Master of Laws.

These examples testify that the intellectual aspects of photography are a topical and significant problem internationally. In Bulgaria, the copyright on photographic information is a subject that is partially addressed in separate articles and publications.

Investigations related to the IP aspects of photographic information - the experience of ULSIT

IP can be seen as an element of information literacy in the university information environment because, in order to successfully develop students at university and in life, they must learn to use efficiently and effectively the wide variety of information and communication technologies to search, find, organize, analyze and evaluate the information they need. This requires them to assemble the entire set of basic skills for research, technological skills, critical thinking and evaluation. [6]

In Bulgaria, the Scientific Research Fund supports financially projects and activities to promote and develop research.

To give examples of research activities in Bulgaria, the NCID database is available at https://cris.nacid.bg/. As a result of a study, the following conclusions can be drawn - since 1998, studies have been carried out on various industrial and IP sites, some of which are dedicated to the creative industries.

An example of the experience of ULSIT in the context of the studied subject is a scientific study on "Organization and IP Management of Photographic Information".

The subject of the scientific research is interdisciplinary and covers current issues in the field of visual arts, law, formal and non-formal education, pedagogy, sociology and others, considered in the context of the contemporary information society. A theoretical material about current trends and business models for the organization and management of copyrights on photographic information has been accumulated, analyzing the legal protection of the three main levels: international law, European Union law and national legal framework.

Another example of good practice in research at ULSIT are two projects funded by the Scientific Research Fund and implemented by ULSIT:

- 1) "Creation and development of educational and scientific facilities for documentary and applied photography as part of the training of students in the professional field 3.5 - Public communications and information sciences" (2019-2021) - Within this project, a team of young scientists, postdoctoral students, PhD students and a student from ULSIT will create a scientific and educational base for documentary and applied photography, designed for ULSIT students trained in the professional field of "Public Communications and Information Sciences". During the experimental training, students will be familiarized with the features of visual literacy and intellectual aspects in photography, resulting in future research on the role and importance of photo-based IT training.
- 2) "Application of the mixed reality in the training and promotion of the cultural heritage for the purposes of the in the university information environment" (2019-2021) - The project is part of a competition to fund fundamental research and societal challenges funded by the National Science Fund (NSF). The methodology of the project is focused on the problems related to the application of the mixed reality in the training and promotion of cultural heritage (CH) in Bulgaria. Within the project through photographic means specialists of ULSIT and South-West University will create a real 3D model of the specific object of CH (ancient city Skaptopara). The team of the project is composed of established scientists, young scientists and PhD students, some of whom are intellectual property specialists.

Conclusion

In order to change the attitude of society towards the improper use of intellectual products, it is necessary to carry out scientific studies and experimental trainings tailored to the technologies and innovations of the present. The examples of IP research in photographic information cited in the report testify to the encouragement and motivation of the educational institution (like ULSIT) and NSF to carry out similar research in the future.

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REFERENCES

- [1] Intellectual property: politics, law and economics. Management, Sofia, University Publishing House "Holding", 2008.
- [2] Kostov, A. Portrait Photography Copyright". URL: https://www.iusauthor. com/publikacii/127-portretna-fotografia-avtorski-prava.html
- [3] Mintie, K. Rights and Reproductions?: Commercial Photography and Copyright Law in the United States, 1884-1909. URL: https://escholarship. org/uc/item/4602r5cs

- [4] Todorin, I., Traykov, M., Mavrevski, R, Stoilov, A., Trenchev, I., 2015. 3D visualization of the biological structures, Proceedings of the Biomath Communications – BIOMATH2015, vol. 2(1), p. 89.
- [5] Todorin, I., Trenchev, I., Mavrevski, R., Stoilov, A., Traykov, M., Yurukov, B. "Computer graphic's application in bioinformatics", Proceedings of the MASSEE International Congress on Mathematics – MICOM-2015, September 2015, Athens, Greece, p. 35.
- [6] Trencheva, T., Planska-Simeonova, K. Contemporary Trends in Intellectual Property Training at University Environment in Bulgaria. // Contemporary Strategies and Innovation in the Knowledge Management, Sofia, Za bukvite – O Pismenech, 2017, pp. 44-52.
- [7] Trencheva, T., S. Denchev. The University's R&D Institutes as a new Educational Approach. // INTED 2015 Proceedings. 9th International Technology, Education and Development Conference March 2nd-4th, Madrid, Spain, pp. 0951-0957.
- [8] Tsvetkova, E., I. Peteva, I. Pavlova. Attitude of Bulgarian Library Specialists Towards Use of Library Resources for Mobile Learning // ICERI 2018 Proceedings, November 2018, Seville, Spain, 2018, pp. 838-842.
- [9] Manolova, R. Study of the Key Factors Impacting the Motivation of Bulgarian Students to Select Higher Education // ICERI 2018 Proceedings, November 2018, Seville, Spain, 2018, pp. 340-344.
- [10] Stoyanova, D., E. Savova, I. Peteva, R. Yotova. Academic Research Projects For Students Support And Motivation In University Information Environment. - In: Proceedings of ICERI2018 Conference 12-14th November 2018, Sevilla, Spain, 2018., pp. 9706-9709.