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**Scientific Creation as a Constitutionally Protected
Category and the Rules of Collective Attribution of
Authorship to Scientific Works in Exact Sciences**

Keywords: the freedom of scientific research as well as dissemination of the fruits thereof, intellectual property; scientific creation; research; protection of intellectual property rights to research results; creator / author

Słowa kluczowe: wolność badań naukowych oraz ogłaszania ich wyników; własność intelektualna; twórczość naukowa; badania; ochrona własności intelektualnej do wyniku badań naukowych; twórca/autor

Abstract

The scope of the constitutional freedom of scientific research and dissemination of the fruits thereof covers not only the right to undertake scientific activity undisturbed by state intervention but also the guarantee of ownership rights to the results of such creative human activity, as „intangible goods” of human creators. The researcher should be protected regardless of whether the form of research outcomes’ formulation demonstrate abilities to be express as independent work or a contribution to independent work. The legal basis for the freedom of scientific research understood in this way may be found in Art. 73 in conjunction with Art. 64(1) and (2) and Art. 21(1) as well as Art. 32 of the Constitution of the Republic of Poland. The systematic interpretation of these provisions makes it possible to formulate a constitutionally binding standard for the protection of the rights of the creator and gives the basis for formulating public legal right with rele-

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vant content like above it is drawn. The implementation of understood in this way public legal right may be asserted claims directly before a court.

Streszczenie

Twórczość naukowa jako kategoria chroniona konstytucyjnie oraz zasady przypisywania zbiorowego autorstwa dzieł naukowych w naukach ścisłych

Konstytucyjna wolność badań naukowych oraz ogłaszania ich wyników obejmuje swym zakresem nie tylko wolne od ingerencji państwa uprawnienie do podejmowania działalności naukowej, ale także gwarancję praw własności do owoców tej aktywności twórczej człowieka jako służących mu „dóbr niematerialnych”. Ochrona taka powinna przysługiwać badaczowi niezależnie od tego, czy sposób wyrażenia wyników badań wykazuje zdolność do ustalenia jako samodzielny utwór lub dzieło wkładowe doń. Podstaw prawnych tak zdefiniowanej treści wolności naukowej poszukiwać należy w art. 73 w zw. z art. 64 ust. 1 i 2 i art. 21 ust. 1 oraz art. 32 Konstytucji RP. Te przepisy poddane systemowej wykładni formułują wiążący ustawodawcę konstytucyjny standard ochrony praw twórcy, tworząc jednocześnie podstawy do wyinterpretowania z nich odnośnej treści publicznego prawa podmiotowego. Realizacji tak rozumianego prawa podmiotowego jednostka może dochodzić bezpośrednio przed sądem.

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I. Scientific creation as constitutional category

In Art. 73 of the Constitution of the Republic of Poland, the legislator guarantees that „the freedom of scientific research and dissemination of the fruits thereof shall be ensured to everyone». It may be defined as the freedom to plan, implement and conduct, using methodologically legitimate research methods and techniques, cognitive processes with the intention to gather, systematize and perform creative analysis of the data so acquired, and then to announce the scientific findings achieved in a qualified form². In this way, the legislator differ-

² Ch. Starck, *Wolność badań naukowych i jej granice*, „Przeгляд Sejmowy” 2007, No. 3, p. 45 i n.; A. Chorążewska, [in:] A. Chorążewska, A. Biłgorajski, *Konstytucyjna wolność badań naukowych a ochrona pracy naukowej. Studium przypadków z nauk ścisłych eksperymentalnych*, Katowice 2018, p. 82.

entiate between the “freedom of speech” from “scientific expression”, although the scope of the former covers typical attributes of the freedom of science³.

Express articulation of the freedom of scientific research triggers an important consequence⁴. The guarantees of such freedom, and the scientific human creation resulting from its exercise (as a separate category of intangible goods), are included in the socially approved system of values, as expressed in the Constitution and covered by the action program of public authorities. Public authorities are obliged to refrain from interfering with the subject of scientific research, the research methods and techniques applied, and to remove factual and legal barriers to such research being conducted, as well as to sanction specific guarantees of that freedom, including also in the area of preventing scientific misconduct or protecting intellectual property⁵. However, those duties are correlated to the obligations of researchers in relation to the state and the society, namely, to conduct scientific research according to research standards and to announce as the outcome of scientific research only such data and analyses which have been obtained within the framework of reliably conducted and verified research activity.

II. Guarantees of intellectual property rights to scientific creation as constitutional rule⁶

Article 73 does not expressly refer to the protection of intellectual property. This does not mean, however, that such guarantees do not form a part of the constitutional regime. Systemic interpretation of the Constitution's

³ Comp. M. Królikowski, K. Szczucki, *Komentarz do art. 73*, [in:] *Konstytucja RP. Komentarz*, eds. M. Safian, L. Bosek, Warszawa 2016, pp. 1672–1683; L. Garlicki, M. Derlatka, *Komentarz do art. 73*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, eds. L. Garlicki, M. Zubik, Warszawa 2016, pp. 789–790; A. Biłgorajski, *Granice wolności wypowiedzi. Studium konstytucyjne*, Warszawa 2013, p. 336; J. Sobczak, *Wolność badań naukowych – standardy europejskie i rzeczywistość polska*, „Nauka i Szkolnictwo Wyższe” 2007, No. 2(30), p. 62.

⁴ B. Banaszak, *Prawo konstytucyjne*, Warszawa 2015, p. 64.

⁵ Comp. W. Brzozowski, *Konstytucyjna wolność badań naukowych i ogłaszania ich wyników*, [in:] *Prawo nauki. Zagadnienia wybrane*, eds. A. Wiktorowska, A. Jakubowski, Warszawa 2014, pp. 25–45.

⁶ More: A. Chorążewska, [in:] A. Chorążewska, A. Biłgorajski, *Konstytucyjna wolność badań naukowych...*, pp. 81–92.

norms under Art. 21(1) in conjunction with Art. 64(1) and (2), in reference to the constitutional axiology, includes among its principles equal legal protection to “scientific creation”. Presently, it would be impossible to ignore close links of creative activity both with the freedom of economic activity (since it often makes a source of income) and with the ownership right (since the Constitutional concept of ownership covers also so-called intellectual property). As a result, since Art. 73 almost entirely disregards the question of creator rights, the protection of such rights must derive from other constitutional provisions⁷. In the constitutional context, the civil law-related components of the “right to proprietary freedom”, as specified in Art. 64 and 21, should be understood as separate yet close (though not necessarily identical) to the traditional institutions of civil law⁸. The terms “ownership” and “other property rights” are strictly constitutional categories with the widest possible implication, whose meaning reaches beyond the realm of civil law and closer to the economic concept of ownership. It is possible to identify the term “ownership” with the term “possessions” from Art. 1 of Protocol 1 to the Convention for the Protection of Human Rights and Fundamental Freedoms⁹ or to interpret it as synonymous with an entirety of property rights¹⁰.

As a result, the scope of rights subject to constitutional protection is not limited to the civil law understanding of “ownership”. At the same time civil law sets a standard for a definition of rights including the guarantee of ownership, approached as a separate constitutional conceptual category. In the civil law approach, the essence of the owner’s position is expressed in an entire catalogue of the owner’s rights to an object, including the right to use the object and to collect profits and freely dispose of the object¹¹. The

⁷ L. Garlicki, *Uwagi do art. 73 Konstytucji*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, vol. 3, ed. L. Garlicki, Warszawa 2003, p. 2; L. Garlicki, M. Derlatka, *Komentarz do art. 73*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz...*, p. 789; L. Garlicki, S. Jarosz-Żukrowska, *Komentarz do art. 64*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, eds. L. Garlicki, M. Zubik, Warszawa 2016, p. 589.

⁸ L. Garlicki, *Uwagi do art. 64 Konstytucji*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, ed. L. Garlicki, vol. 3, Warszawa 2003, p. 7.

⁹ Dz.U. 1995, No. 36, item 175/1.

¹⁰ Judgments of Constitutional Tribunal of 13.12.2012, P 12/11 and 3.04.2008, K 6/05.

¹¹ Judgments of Constitutional Tribunal of 05.09.2006, K 51/05 and 07.11.2006, SK 42/05.

aforementioned position may include attributes as: absolute nature (effective *erga omnes*), absence of time limits, primary flexibility and exclusiveness of the owner's powers, including the right to make any use of the owned object or to dispose of it¹². The public subjective right under Art. 64(1) and (2) sanctions the guarantee of "proprietary freedom", whose scope covers both ownership in the traditional, civil law sense as well as broadly understood "intellectual property"¹³. Its scope is to include the rights of an individual vis-a-vis the state and certain guarantees in the sphere of horizontal relations. In the vertical approach, individuals are entitled to claim that the state does not interfere with ownership or other property rights as well as to institutional guarantees of the possibilities to enjoy such rights. On the other hand, the horizontal relation, envisaged expressly in Art. 31(3) of the Constitution of the Republic of Poland, requires that the owner be afforded protection against third-party intervention and calls for institutionalization of the relations between individuals in the area of property rights. Nevertheless, the legislator's intervention in the sphere of constitutionally guaranteed rights may be necessary to properly weigh the competing constitutionally-protected interests of the owner and any parties violating the owner's rights¹⁴.

Analysing that problem in respect to one of the categories of intellectual property rights, namely copyrights, the Constitutional Tribunal in the case SK 32/14¹⁵ expressed the opinion that Art. 79 of the Act of 4 February 1994 on copyright and related rights¹⁶ (hereinafter: Copyright Law Act) sanctions the principle of the ownership-based model of protecting copyrights, where the creator is granted a position similar to that of owners of an object because of the "owner-related" nature of the creator's attributes (Art. 17). At the same time, it would be impossible to defend the thesis that the Tribunal covered with the protection under Art. 64(1) and (2) only the sphere of

¹² Comp. B. Banaszkiwicz, *Konstytucyjne podstawy prawa własności*, Warszawa 1999, p. 17; K. Zaradkiewicz, *Instytucjonalizacja wolności majątkowej. Koncepcja prawa podstawowego własności i jej urzeczywistnienie w prawie prywatnym*, Warszawa 2013, pp. 306–335.

¹³ The judgment of the Constitutional Tribunal of 23.06.2015, SK 32/14.

¹⁴ Ibidem.

¹⁵ The judgment of the Constitutional Tribunal of 23.06.2015, SK 32/14.

¹⁶ Dz.U. 2018, item 1191.

the creator's economic rights, excluding the author's moral rights from the scope of the constitutional guarantee. This is the case as these copyright categories are not autonomous but are instead mutually dependent without forming unconditioned or independent legal concepts. The creator's right to exercise his or her economic rights is genetically and functionally related to the creator's moral rights. As a result, the holder of the author's economic rights should demonstrate that his rights to use the work are correlated with the author's moral rights in his possession or that he derives such rights from a license contract or a contract for the work's sale in specific fields of exploitation concluded with the creator or the creator's legal successor (e.g. by way of inheritance or sale, etc.). Such conclusion may be supported by systemic interpretation of the Act. Namely, considering the scheme (content distribution) and consecutive provisions of the Copyright Law Act (i.e. chapter 3 Contents of copyright, divided into section 1 Author's moral rights and section 2 Author's economic rights, and then chapter 6 Protection of author's moral interests and chapter 7 Protection of author's economic rights), it must be concluded that the content of "copyright" in a "work" consists of two elements: "author's moral rights" and "author's economic rights" understood as a certain whole¹⁷.

The cited Tribunal's decision demonstrates the general rule of the constitutional guarantee in the sphere of intellectual property rights. First, all products of individualized and creative human acts (regardless of whether they have been defined in law and covered by protection on the level of lower rank legislation) have a "proprietary element" and, in the same way, as manifestations of an economic value, are protected on equal terms under Art. 64. Second, the constitutional principle of equality (Art. 64(2) in conjunction with Art. 32)¹⁸ requires that the legal situation of an author, who is the creator of a non-tangible intellectual product of analogous nature (legal characteristics), be subject to legal protection using a similar form and having analogous intensity.

The element determining constitutive features of "intangible goods" subject to constitutional protection must be their legally-sanctioned catego-

¹⁷ More: A. Chorążewska, [in:] A. Chorążewska, A. Biłgorajski, *Konstytucyjna wolność badań naukowych...*, pp. 89–92.

¹⁸ The judgment of Constitutional Tribunal of 9.03.1988, U.7/87, OTK 1988, item 1, p. 14.

ry with a relatively long tradition, namely “work” as per the Copyright Law Act. There are three distinctive features required of a creative act for it to be considered a form of “work”. It must be (1) a product of human intellect (2) it must come into being as a result of a human-driven creative act (3) it must be of an individualized nature. Where, in the society and legal practice, there appear “intangible goods” other than “work” with analogical features, each such product of the human intellect is covered by the guarantee of ownership under Art. 21(1) in conjunction with Art. 64(1) and 2. In conditions analogical to works, other “intangible goods” are created, including legally defined “inventions”, protected by industrial property rights or “scientific human creation” guaranteed under Art. 23 of the Civil Code¹⁹, as well as others – non-defined by law – products of the human intellect, including in the area in which the freedom of scientific research is granted. In effect, each such interest, as having the same substantively essential features (so called relevant features) is covered by the constitutional guarantee. This is not a qualitatively new legal finding. The concept of “rights to intangible interests” was developed in the field of intellectual property law²⁰. Such rights are identified as absolute economic rights guaranteeing the exclusive use of assets to which they refer. Creators may seek these “rights to intangible interests” under specialized legislative acts devoted to specific intangible goods or, in their absence, under the general principles of civil law, as laid down in Arts. 23 and 24 of the Civil Code.

In summary, systemic interpretation of Art. 73 and Art. 21(1) in conjunction with Art. 64(1) and 2 of the Constitution of the Republic of Poland allows to formulate a constitutional norm-rule (supplementing the scope of the constitutional freedom of science) guaranteeing intellectual property rights to scientific creation. It is manifest in a scholar-creator’s rights to “intangible goods” developed during the course of scientific research, regardless of the method and form of their identification or expression.

¹⁹ Comp. J. Greser, *Prawa autorskie a prawa człowieka* (§ 6. *Prawa autorskie w Konstytucji RP*), [in:] *Granice prawa autorskiego*, eds. J. Kępiński, K. Kłafkowska-Waśniowska, R. Sikorski, Warszawa 2010, pp. 197–200.

²⁰ Comp. A. Kopff, *Prawo cywilne a prawo dóbr niematerialnych*, „Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace z wynalazczości i ochrony własności intelektualnej” 1975, No. 5, pp. 12–13, 15, 19–20, 24–25, 28–31.

III. Non-adequacy of the Copyright Law Act to the protection of all intangible goods as manifestations of human scientific creation²¹

The problem of authorship under the Copyright Law Act should be considered from a factual perspective²². This Act refers to an author's relationship to the external outcome of his creative activity. Its natural referent is the "creator of a work" within the meaning of the Act. Although the terms "author" or "creator" are deeply enrooted in the science of copyright law²³, their definition has not been formulated in legislation²⁴. In the context of widely understood intellectual property law, the term "author" should be understood as: author of a work and holder of copyright under the Copyright Law Act, author of an invention (*know how*) covered by intellectual property law or author of an original idea other than *know how*. The concept of "author" or "creator" should be understood as a person who makes a change in the world by his own efforts whose nature oversteps common, routine activities. The nature of such acts must be strictly creative and intellectual, giving rise to a new concretized intellectual good²⁵.

In the Copyright Law Act, one cannot find any exact definition of "work". The Act's provisions suggest "work" is any manifestation of creative activity of an individual nature, identified in any, even short-lived or unfinished, form, regardless of its value, use and means of expression²⁶. Under Art. 1(2¹) of the Act, the protection covers only the means of expression; it does not refer to discoveries, ideas, procedures, methods and modes of operation or mathematical conceptions. Under the cited Act, a work may be expressed in verbal

²¹ More: A. Chorążewska, [in:] A. Chorążewska, A. Biłgorajski, *Konstytucyjna wolność badań naukowych...*, pp. 92–123.

²² More: M. Jankowska, *Autor i prawo do autorstwa*, Warszawa 2011.

²³ It was used in legislation acts from: 10.07.1952 o *prawie autorskim* and 29.03.1926 o *prawie autorskim*.

²⁴ Comp. K. Święcka, J.S. Święcki, *Prawo autorskie i prawa pokrewne*, Warszawa 2004, pp. 32–33; M. Mozgawa, *Prawo autorskie i prawa pokrewne. Zarys wykładu*, Warszawa 2005, pp. 32–33.

²⁵ More: M. Jankowska, *Autor...*, pp. 84–114, 100–102.

²⁶ D. Sokołowska, „*Omnis definitio periculosa*”, czyli kilka uwag o zmianie paradygmatu utworu, [in:] *Granice prawa autorskiego*, eds. J. Kępiński, K. Klafkowska-Wiśniowska, R. Sikorski, Warszawa 2010, p. 16 i n.

form, by mathematical symbols, graphic signs, as, for example, literary, journalistic or scientific work. Within the framework of that Act, one may not use the categories: “author of an idea,” “author of a discovery” or “author of a scientific theory,” unless the concept, discovery, idea²⁷ or scientific theory has been expressed by words or drawings in a scientific publication²⁸. In such a case, the author will be covered by copyright protection only indirectly, i.e. in respect to the created scientific work describing the effect of creative and individualized human acts, expressed in a specific form and identified as an independent work or contribution to such independent work.

To ascertain the existence of a “work” and the copyright of such work as an effect of conscious human activity, three cumulative conditions must be met. First, the acts leading to its “coming into existence” must be creative²⁹. Second, such acts must be characterized by individuality³⁰. Third, it is necessary to establish the work in any form even incomplete. In this context, the Supreme Court characterized a work as “a creative, subjectively new, original product of the intellect, formed by the creator’s individual nature, which created by another person would be established in another form (would be different)”³¹.

The concept of identification of a work refers to its achievement of “any form, even short-lived, however, stable enough for the work’s features and content to have an artistic effect”³². In order for the copyright law protection to be afforded, it is necessary that the work be externalized so as to enable its individualization, i.e. distinction from other products of human creation, and that its creation be communicated to the external world so that its existence

²⁷ See: K. Jasińska, *Ochrona idei – zagadnienia wybrane*, [in:] *Zagadnienia prawa autorskiego*, ed. J. Barta, „Prace Instytutu Prawa Własności Intelektualnej UJ” 2006, No. 93, pp. 9–23.

²⁸ Comp. A. Górnicz-Malcahy, *Utwór naukowy jako przedmiot ochrony autorskoprawnej*, [in:] *Aktualne zagadnienia prawa prywatnego*, ed. E. Marszałek, Wrocław 2012, Biblioteka Cyfrowa Uniwersytetu Wrocławskiego, pp. 46.

²⁹ See: D. Flisak, *Komentarz do art.1*, [in:] *Prawo autorskie i prawa pokrewne. Komentarz*, ed. D. Flisak, Warszawa 2014.

³⁰ See: J. Barta, R. Markiewicz, *Komentarz do art. 1 ustawy o prawie autorskim i prawach pokrewnych*, [in:] *Prawo autorskie i prawa pokrewne. Komentarz*, eds. J. Barta, R. Markiewicz, Warszawa 2011, p. 23 i n.

³¹ The judgment of Supreme Court of 5.07.2002, III CKN 1096/00, LEX no. 81369.

³² The judgment of Supreme Court of 25.04.1973, I CR 91/73, OSNCP 1974, no 3, poz. 50.

may be demonstrated by documentary evidence, witness testimony or other pieces of evidence³³. If the work was to assume the form of mere description of a future product of the human intellect which might hypothetically come into being, it would be impossible to establish its existence in the legal sense, under the understanding of said Act³⁴. At the same time, however, a non-recorded work, as “work in an intangible form, may be embodied only through appropriate acts of its performer”³⁵.

In reference to the above, it must be noted that the contemporary “world of scientific research” significantly differs from the conditions of conducting scientific research in which the provisions of the Copyright Law Act were drafted and then firmly established, including on scientific works as sanctioned therein³⁶. The challenges (problems to solve) placed before Science and requirements materializing in this context in relation to scientists have been subject to considerable and often very profound changes in relation to ones present in the XX century. A transformation has occurred in terms of both research methods and techniques used in scientific research. New research areas emerge, such as, for example, chemometrics in analytical chemistry or the development of omics. We also witness the impact of data-driven science (element of a wider concept, which is formed today by “big data”) on the terms of conducting scientific research. Among others, development of omic sciences and research based on (survey of laboratory) experimental data analysis opens new possibilities of discovering knowledge. On the other one, this has also been a source of misunderstandings regarding the definition of scientific research and of Science writ large³⁷.

We have gone through not just evolutions but a peculiar “revolution in doing Science”. It was determined by transitions in the population, the requirement of protecting natural environment (e.g. Green Chemistry), human health and life, technological progress and financial pressure or scientific

³³ The judgment of Appeal Court in Poznań of 28.08.2009, IACa 309/09, not publ.

³⁴ The judgment of Appeal Court in Poznań of 17.12.2009, IACa 893/09, LEX no 628228.

³⁵ The judgment of the Supreme Court of 27.08.2013, II UK 26/13, LEX no 1379926.

³⁶ More: A. Chorążewska, [in:] A. Chorążewska, A. Biłgorajski, *Konstytucyjna wolność badań naukowych...*, pp. 144–209.

³⁷ See: Editorial, *Defining the scientific method*, “Nature Methods” 2009, vol. 6, No. 4, p. 237, <https://doi.org/10.1038/nmeth0409-237>.

policy of national governments, the European Union, and economically- and scientifically- developing China³⁸. Today the ecosystem of scientific research is very complicated. It is almost impossible in the area of exact or technical sciences for an experimentalist to work alone in a laboratory and then to write single-author scientific studies. In the 1980s it became universal for research to be conducted in teams or even multidisciplinary environments, whose results have been published in multi-author scientific works. It has become substantial who participated in the initiation and conduct of the research, and then in the analysis of its results³⁹. This regularity is referred to by Gretchen L. Kiser, executive director of the Research Development Bureau at the University of California in San Francisco⁴⁰, who argues that both questions and research approaches have now become so complex that the need to engage in expanded team science has grown. Moreover, it is increasingly more difficult to point, within the framework of inter- or even trans-disciplinary research projects, to their single leader (head). In consequence, the customs of attributing authorship as developed in exact sciences – in isolation from the Copyright Law Act – as publications announcing research outcomes achieved by a team have become unhelpful and inadequate to the new conditions in which research is conducted. Gretchen L. Kiser postulates the need to abandon distinguishing, in the attribution of authorship, the first author and the corresponding author, a distinction to which so much attention has been paid by evaluators assessing the scientific value of a publication and individual contribution of a scientist to the research announced in the publication.

In such conditions, the terms of attribution of authorship as prescribed in the Copyright Law Act in no way correspond to scientific needs. Ryszard Markiewicz detected this problem and explained that co-authorship takes place only when each person individually makes his own contribution, distinguished by the feature of creativity. As a result, the object protected by copyright law is creative contribution and not the scientific outcome, which is not character-

³⁸ See: A. Abbott & Q. Schiermeier, *How European scientists will spend €100 billion*, “Nature” 2019, vol. 569, pp. 472–475, doi: 10.1038/d41586-019-01566-z.

³⁹ See: M.T. Greene, *The demise of the lone author*, “Nature” 2007, vol. 450, Iss. 7173, p. 1165.

⁴⁰ See: G.L. Kiser, *No more first authors, no more last authors*, “Nature” 2018, vol. 561, p. 435, doi: 10.1038/d41586-018-06779-2.

ized by individuality⁴¹. The value or exploratory nature of the research work are of no legal relevance in the light of the Copyright Law Act. However, attribution of authorship to scientific works in the area of exact and technical sciences took another direction. Persons gain co-authorship on the basis of participation in the process of obtaining the scientific results announced in the publication. This means inclusion among the group of authors of persons whose contribution consisted in the provision of the research idea, research hypothesis, but also ones who technically performed scientific experiments⁴². However, it is reserved that their contribution should consist at least in the pursuit of the problem, direction of works and formulation of final conclusions of the project⁴³. Ryszard Markiewicz, considering the specificity of scientific work, regards such practice as legally admissible. However, he refuses to recognize, on its basis, the right to co-authorship under the Copyright Law Act. At the same time, he explains that such practice means that creators stop designating co-authorship in the understanding of the Copyright Law Act and indicate all co-participants of the scientific work who took part in its preparation, at all stages of its development⁴⁴. At the same time, the creator of a research result may gain the status of a co-author when: 1) in the scientific environment it is customarily accepted to include creators of scientific research outcomes as co-authors, 2) such person has co-participated in the scientific research presented in the publication, 3) such co-participation was not limited to performing mechanical, routine or administrative tasks⁴⁵. Moreover, the decisive factor may be the moral and social views adhered to in a given society (academic environment), especially the applicable codes of ethics⁴⁶.

The abovementioned customs regarding the attribution of authorship, which are admitted in Polish literature only with the said restrictions, found normative support in German law in 24 [publication of research outcomes] of the German Framework Act on higher education (*Hochschulrahmengesetz*)

⁴¹ Comp. R. Markiewicz, *Ochrona prac naukowych*, „Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace z wynalazczości i ochrony własności intelektualnej” 1990, No. 55, p. 95.

⁴² Comp. R. Markiewicz, op.cit., p. 52.

⁴³ K. Daszkiewicz, W. Daszkiewicz, *Glosa do wyroku SN z 18.11.1969, VKN 267/69*, „Państwo i Prawo” 1973, No. 5, p. 175.

⁴⁴ Comp. R. Markiewicz, op.cit., p. 53.

⁴⁵ Ibidem, p. 105.

⁴⁶ Ibidem, p. 96.

of 26 January 1976⁴⁷. Under the cited norm, in the dissemination of results of scientific research, one should indicate as co-authors collaborators who made a scientific or other substantial contribution to the achievement of the results. As much as possible, the scope of their contribution should be provided. An analogical norm *lex specialis* in relation to general copyright law rules is missing in our legal system, although the constitutional guarantee of intellectual property rights in “non-tangible goods” developed in the sphere of scientific creation requires that creators of research outcomes be afforded appropriate legal protection.

IV. The legal status of codes of ethics for attributing authorship to scientific works

It follows from the above considerations that the protection of scientific creation realized within the framework of copyright law or civil law is not always sufficient. In case-law, it is highlighted that copyrights are not violated when another person, even against the author’s will, adopts only specific parts of a work without using the work or its parts in the formal and substantive sense. This is the case since mere ideas, theses and scientific solutions in a broad sense are not, as such, subject to the protection under the Copyright Law Act, although this does not exclude the eventuality of protection under Art. 23 of the Civil Code⁴⁸. In another decision, adequacy of the last form of protection was questioned, and the court noted that it cannot be concluded that a mere technical aspect of presentation of the outcomes of measurements made may constitute “scientific creation” subject to protection under Art. 23 CC without explaining the research methods used by the plaintiff⁴⁹.

Detailed analysis of the provisions applicable in this regard leads to the conclusion that the fullest legal protection is ensured to scholars by “the Code of Ethics for Research Workers” prepared by the Science Ethics Committee and adopted by the General Assembly of the Polish Academy of Sciences on 1

⁴⁷ BGBl. I S. 18 z 19.01.1999 and 1622 z 15.11.2019.

⁴⁸ The judgment of Supreme Court of 8.02.1978, II CR 515/77, [in:] A. Korpała, *Prawo autorskie. Orzecznictwo*, eds. S. Stanisławska-Kloc, A. Matlak, Warszawa 2010, p. 93.

⁴⁹ The judgment of Appeal Court in Warsaw of 29.03.1994, I ACr 104/96, not publ.

December 2016. The provision of item 3.3. "Authorship and publication practice" reads, among others, that authorship must be based solely on substantial intellectual contribution to the research. This includes: significant contribution in initiating the scientific idea, formulating conceptions, designing research, significant share in data acquisition, in the analysis and interpretations of data and in drafting the article or revising it critically for intellectual content (2). Acquisition of funding, provision of technical assistance or materials, the collection of data, general supervision of the research group, by themselves, do not justify authorship. [...] When listing authors and their affiliations, it is appropriate to mention the nature of their contribution to the research (3). The sequence of authors should be consistent with the existing customs in a given scientific discipline and agreed upon by all, ideally at the start of the project (4). Intellectual contributions of others who have influenced the reported research should be appropriately acknowledged (5).

In the context of the above, a question arises if the cited code of ethics includes mandatory norms binding on researchers or if it is formally non-binding but only arranges the customs of attributing authorship which are considered appropriate and accepted in the scientific environment. In other words, whether or not it is possible in a dispute about the authorship of a publication to invoke that normative regime. Freedom of scientific research may not be approached as a category free from any intervention. As in the case of each subjective right, it may be subject to restrictions sanctioned under Art. 31(3) of the Constitution of the Republic of Poland. As a consequence, statutory intervention in the sphere of the freedom of science is admissible when it is necessary in a democratic state ruled by law for the protection of its security or public order, the natural environment, health or public morals, the freedoms and rights of other persons, provided that this does not violate the principle of proportionality and the essence of freedoms and rights⁵⁰. The boundaries of exercising the freedom of science may be limited not only in the vertical but also horizontal dimension. From the perspective of these considera-

⁵⁰ See: Judgments of Constitutional Tribunal of: 12.01.2000, P 11/98; 20.02.2002, K 39/00; 10.04.2002, K 26/00; 13.03.2007, K 8/07. Comp. K. Wojtyczek, *Granice ingerencji ustawodawczej w sferę praw człowieka w Konstytucji RP*, Kraków 1999, p. 150 i n.; A. Łabno, *Ograniczenia wolności i praw człowieka na podstawie art. 31 Konstytucji III RP*, [in:] *Prawa i wolności obywatelskie w Konstytucji RP*, eds. B. Banaszak, A. Preisner, Warszawa 2002.

tions, it is important to delimit the boundaries of freedom of research in the sphere of protection of intellectual property rights of scholars in their independent, creative and substantial contributions to research process, which are not guaranteed under the Copyrights Law Act or the Civil Code. The legislator complied with that obligation. Nevertheless, the lawmaker concluded that it is inadvisable that the national legislator should take steps in this regard. Namely, in Art. 39(3) of the Act of 30 April 2010 of the Polish Academy of Sciences⁵¹, the Committee for Ethics in Science appointed by the Academy was obligated to prepare a code of ethics for research workers and undertake activities intended to promote standards of scientific research integrity. In this way, the legislator authorized the Academy to limit the freedom of research in the horizontal dimension. The legal construction used, of the legislator delegating the power under Art. 31(1) to a third party, is no exception. A similar solution was applied in the Act regarding the topic of spatial planning, where local government planners were empowered to specify the terms of use of immovable properties, including the right to restrict their owners' rights. A legal construction analogical to the discussed one was used in the Act of 2 December 2009 on chambers of physicians⁵², under which physicians' self-government and the National Congress of Physicians were empowered to enact the principles of medical ethics (Art. 5 item 1 and Art. 38 item 1) in the form of the Code of Medical Ethics. The Constitutional Tribunal confirmed the legal admissibility of such procedure and its compatibility with the Constitution⁵³, indicating that "delegation of the power to interfere with certain constitutional freedoms of persons pursuing a public trust profession to the professional self-government may be justified in certain conditions, or even considered as conforming to the needs of "due pursuance" of regulated professions. However, such empowerment may not be blanket in nature". The Tribunal added that "a slightly more liberal understanding of that prerequisite is supported by the specificity of public trust professions as professions regulated and subjected to the obligation of adherence to an association [...] accession by a given person – upon fulfilment of the conditions prescribed in statutory law – to a given professional association [...] is synonymous with

⁵¹ Dz.U. 2016, item 572.

⁵² Dz.U. 2019, item 965.

⁵³ Comp. The judgment of Constitutional Tribunal of 22.10.2003, P 21/02.

such person's voluntary subordination to the »supervision of due pursuance of the profession«” and, in the same way, “constitutes voluntary subordination to the internal rules of the association”⁵⁴. Moreover, the Tribunal concluded that the provisions of the Code of Medical Ethics, belonging to a separate normative (deontological) order, in the context of the Act on chambers of physicians and within the range specified by its provisions, gain legal force as a part of generally applicable law.

V. Conclusions

In summary, the legislator fulfilled its obligations under Art. 73 in conjunction with Art. 64(1) and (2) of the Constitution of the Republic of Poland and sanctioned the mechanisms of legal protection of intellectual property rights to scientific creation⁵⁵. Respective protection is afforded to scholars in the first place by the Copyright Law Act and Art. 23 and 24 of the Civil Code, and then by the Code of Ethics for Research Workers. The provisions of that code, although belonging to another normative order (deontological), in the context of the Act on the Polish Academy of Sciences (Art. 39(3)) and insofar as specified in its provisions, gain legal force in the area of generally applicable law and form, under Art. 31(3) of the Constitution of the Republic of Poland, a part of the legal system. In consequence, if this is justified by the specificity of conducting scientific research in a given field of study, researchers may resign from the attribution of authorship of scientific works according to the Copyrights Law Act or general principles of copyright law and adopt the rules provided in the Code of Ethics. In cases of dispute over authorship, a scholar seeking recognition of his contribution to research carried out in a team and the status of co-author of a publication may, apart from the Copyright Law Act and Art. 23 of the Civil Code – invoke the provisions of the Code of Ethics and adduce, as the legal basis of such claims, the contract for joint conduct of the research. Such a contract may be concluded in oral form, even implied, under the general terms of civil law.

⁵⁴ The judgments of the Constitutional Tribunal of 23.04.2008, SK 16/07.

⁵⁵ More: A. Chorążewska, [in:] A. Chorążewska, A. Biłgorajski, *Konstytucyjna wolność badań naukowych...*, pp. 114–143, 231–241.

Literature

- Abbott A., Schiermeier Q., *How European scientists will spend €100 billion*, "Nature" 2019, vol. 569.
- Banaszak B., *Prawo konstytucyjne*, Warszawa 2015.
- Banaszkiewicz B., *Konstytucyjne podstawy prawa własności*, Warszawa 1999.
- Biłgorajski A., *Granice wolności wypowiedzi. Studium konstytucyjne*, Warszawa 2013.
- Brzozowski W., *Konstytucyjna wolność badań naukowych i ogłaszania ich wyników*, [in:] *Prawo nauki. Zagadnienia wybrane*, eds. A. Wiktorowska, A. Jakubowski, Warszawa 2014
- Chorążewska A., Biłgorajski A., *Konstytucyjna wolność badań naukowych a ochrona pracy naukowej. Studium przypadków z nauk ścisłych eksperymentalnych*, Katowice 2018.
- Daszkiewicz K., Daszkiewicz W., *Glosa do wyroku SN z 18.11.1969, VKN 267/69*, „Państwo i Prawo” 1973, No. 5.
- Editorial, *Defining the scientific method*, „Nature Methods” 2009, vol. 6, No. 4.
- Garlick L., Derlatka M., *Komentarz do art. 73*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, eds. L. Garlicki, M. Zubik, Warszawa 2016.
- Garlicki L., Jarosz-Żukrowska S., *Komentarz do art. 64*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, eds. L. Garlicki, M. Zubik, Warszawa 2016.
- Garlicki L., *Uwagi do art. 64 Konstytucji*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, vol. 3, eds. L. Garlicki, Warszawa 2003.
- Garlicki L., *Uwagi do art. 73 Konstytucji*, [in:] *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, vol. 3, ed. L. Garlicki, Warszawa 2003.
- Górnicz-Malcahy A., *Utwór naukowy jako przedmiot ochrony autorskoprawnej*, [in:] *Aktualne zagadnienia prawa prywatnego*, ed. E. Marszałek, Wrocław 2012.
- Greene M.T., *The demise of the lone author*, "Nature" 2007, vol. 450, Iss. 7173.
- Greser J., *Prawa autorskie a prawa człowieka (§ 6. Prawa autorskie w Konstytucji RP)*, [in:] *Granice prawa autorskiego*, eds. J. Kępiński, K. Klafkowska-Waśniowska, R. Sikorski, Warszawa 2010.
- Jankowska M., *Autor i prawo do autorstwa*, Warszawa 2011.
- Jasińska K., *Ochrona idei – zagadnienia wybrane*, [in:] *Zagadnienia prawa autorskiego*, ed. J. Barta, „Prace Instytutu Prawa Własności Intelektualnej UJ” 2006, No. 93.
- Kiser G.L., *No more first authors, no more last authors*, "Nature" 2018, vol. 561.
- Kopff A., *Prawo cywilne a prawo dóbr niematerialnych*, „Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace z wynalazczości i ochrony własności intelektualnej” 1975, No. 5.
- Królikowski M., Szczucki K., *Komentarz do art. 73*, [in:] *Konstytucja RP. Komentarz*, eds. M. Safian, L. Bosek, Warszawa 2016.

- Łabno A., *Ograniczenia wolności i praw człowieka na podstawie art. 31 Konstytucji III RP*, [in:] *Prawa i wolności obywatelskie w Konstytucji RP*, eds. B. Banaszak, A. Preisner, Warszawa 2002.
- Markiewicz R., *Ochrona prac naukowych*, „Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace z wynalazczości i ochrony własności intelektualnej” 1990, No. 55.
- Mozgawa M., *Prawo autorskie i prawa pokrewne. Zarys wykładu*, Warszawa 2005.
- Prawo autorskie i prawa pokrewne. Komentarz*, ed. D. Flisak, Warszawa 2014.
- Prawo autorskie i prawa pokrewne. Komentarz*, eds. J. Barta J., R. Markiewicz, Warszawa 2011
- Prawo autorskie. Orzecznictwo*, eds. S. Stanisławska-Kloc, A. Matlak, Warszawa 2010.
- Sobczak J., *Wolność badań naukowych – standardy europejskie i rzeczywistość polska*, „Nauka i Szkolnictwo Wyższe” 2007, No. 2/30.
- Sokołowska D., „*Omnis definitio periculosa*”, czyli kilka uwag o zmianie paradygmatu utworu, [in:] *Granice prawa autorskiego*, eds. J. Kępiński, K. Klafkowska-Wiśniowska, R. Sikorski, Warszawa 2010.
- Starck Ch., *Wolność badań naukowych i jej granice*, „Przegląd Sejmowy” 2007, No. 3.
- Święcka K., Święcki J.S., *Prawo autorskie i prawa pokrewne*, Warszawa 2004.
- Wojtyczek K., *Granice ingerencji ustawodawczej w sferę praw człowieka w Konstytucji RP*, Kraków 1999.
- Zaradkiewicz K., *Instytucjonalizacja wolności majątkowej. Koncepcja prawa podstawowego własności i jej urzeczywistnienie w prawie prywatnym*, Warszawa 2013.