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Thesis of the doctoral (PhD) dissertation

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The effect of the Internet on the right of reproduction and the right of communication to the public

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I. Introduction - The background of the dissertation

Technological development is one of the biggest achievement and perturber of mankind. The exposure of copyright to the technological development is rather high. Access to copyright protected goods and other subject matters is the common interest of the society. The subject matters of the protection usually carry information. Access to these information has exponentially grown after the advent of digital technologies and especially the Internet. New, legal and illegal business models were developed with the aim of dissemination of copyright protected goods. Internet posed a unique and new challenge, which triggered answers from the international, European and national legislators. Their answers were slower than the technological development and highly depended on the mind-set of the instrument of the copyright system. When the WIPO Internet Treaties were adopted, copyright or authors' rights had already been there with well structured, property-like system which also recognized the personal connection between the work and its author. National legislators adopted wide range of detailed copyright statutes with a broad scope of economic and moral rights, as well as limitations and exceptions. This already-existing structure were translated and imported into the world of Internet, after a set of necessary modifications. New types of protected subject matters were recognized, such as the software and database, the scopes of reproduction and communicating to the public have been expanded. Furthermore, the right of communication to the public came into an overlap with the right of reproduction in the last two and a half decades.

The data transmission over the Internet and the practice of the right of communication to the public made the adoption of a new exception necessary; the exception of the temporary acts of reproduction was adopted by the InfoSoc Directive.

New intermediaries also appeared. Their business models and the technology behind aimed at the digital, online, immaterial dissemination of the copies of copyright protected goods and other subject matters. This phenomenon indicates the differences between the new ways of distribution and the traditional commercial chains which were developed to disseminate the physical copies. In this traditional model the right of reproduction and the right of distribution are dominant. Meanwhile in the Internet, right of making available to the public within the framework of the communication to the public is the prevailing economic right. However, the new business models usually operated without any kind of licences and they missed to pay the proper remuneration to the relevant stakeholders. The group of intermediaries, which are operating lawfully, is confinable. Liability for infringements by the users using their networks

and services is secondary, contributory, therefore excusable based on the awareness about the infringement.

1. The object, motivations and aims of the research

1.1. Aim of the dissertation – The development of copyright after the advent of the Internet

The aim of the dissertation is to reveal those intersections of the economic rights, where interfering of the legislator was necessary in order to secure the high level of protection. The myth of the freedom of Internet vanished quickly. Right holders, commercial users of protected subject matters as well as internet service providers claim clear rules and relations. Online uses concern two economic rights; the right of reproduction and the right of communication to the public. These two rights are in an overlap regarding those cases when the copies are made only for a temporary period in the RAM memory of the computer required by the data transmission. Such uses are important for the streaming-based business models.

Choosing the above mentioned two economic rights for the subject matter of the dissertation is justified by the fact that online dissemination is based on the right of communication to the public which requires the reproduction of the subject matter at least for a limited period of time. Beyond the analyzation of the framework of economic rights it is reasonable to reveal the path of the protected goods from the creator through the intermediary to the end users, what are the rules of the legal environment wherein the dissemination takes place.

1.2. Analyzation of the right of reproduction in the digital and online sphere

Right of reproduction is the oldest economic right of copyright. Every type of economic exploitation of the work starts with the reproduction of the original work, let it be analogue or digital. Right of reproduction is recognized by several international copyright treaties, such as the Berne Convention regarding the authors, the Rome Convention of 1961 regarding the performers, phonogram producers and broadcasting organisations, the TRIPS Agreement, the WIPO Internet Treaties and the Beijing Treaty. Digital copies are brought into the concept of

reproduction by the WIPO Internet Treaties. The two compared systems, the copyright system of the United States and the authors' rights regime of the European Union also recognize the broad concept of reproduction for both the authors and related right holders.

1.3. Analyzation of the right of communication to the public in the digital and online sphere

Legal policy behind the right of communication to the public is that to grant the right to authors and related right holders to exploit every immaterial uses and to authorise of every uses of their works and other subject matters. Technological development permanently effected the evolution of the communication to the public right. Uses aimed at the distant public by radio broadcast, television, satellite and cable television were covered by very similar economic, communication-related rights with the very same logic, but still differently. The WIPO Internet Treaties unified the fragmented rights of communication-related uses. The new and broad right of communication to the public covered the right of making available to the public for every Internet-related uses. This path was followed by the InfoSoc Directive in the European Union. However, in the United States the legislator regulated the Internet-based dissemination differently.

1.4. Limitations and exceptions with special regard to the temporary acts of reproduction

Internet-based uses affected the rules of limitations and exceptions as well. One of the most important part of the dissertation is dealing with the overlap between the right of reproduction and communication to the public. The overlap means that the right of reproduction is acting as a „servant" of the communication to the public in case of those uses, such as streaming, where permanent reproduction of the work is not necessary, the copies exist only for a limited time. These copies fall under the scope of Article 5 Paragraph 1 of the InfoSoc Directive if they fulfil the conjunctive criteria of Article 5. Paragraph 1. Parallel with the European Union, in the United States several legal debate rose in connection with the temporary copies. The solution followed by the U.S. was slightly different from the one in the European Union.

1.5. Assessment of intermediaries with special regard to the secondary liability

The dissertation is dealing with the different type of intermediaries, as well as with the possible ways of exceptions from liability committed by third parties using the service of the intermediaries. Operation of the Internet can hardly be understood without intermediaries providing networks for the flow of information and connecting together creators, commercial users and end users. Without them this dissertation probably would have never been concluded as the intermediaries created the infrastructure where Internet-related aspects of the two discussed economic rights can be understood.

2. Gathering of data and the applied methods

During my work I relied on copyright-related international treaties, as well as the directives of the European Union. Among others, subject of my research were the Berne Convention of 1886 for the Protection of Literary and Artistic Works, the Rome Convention of 1961 for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, the TRIPS Agreement, the WIPO Internet Treaties and the Beijing Treaty of 2012 on Audiovisual Performances. From the copyright law of the United States Digital Millennium Copyright Act, Audio Home Recording Act and the Copyright Act of 1976 were studied. From the European Union the 93/83/EC Satellite Directive, 96/9/EC Database Directive, 2009/24/EC Software Directive, 2000/31/EC E-commerce Directive, 2001/29/EC InfoSoc Directive, 2004/48/EC Enforcement Directive, 2006/115/EC Rental Directive and 2019/790 CDSM Directive were also used. Interpretation of the body of law is relied on the rich case law of the European Court of Justice and the judiciary of the United States.

The dissertation rests upon a the numerous Hungarian and much more various English resources. Scholars, such as Jane C. Ginsburg, Paul Goldstein, Bernt P. Hugenholtz, Michel M. Walter, Tanya Aplin, Jessica Litman, Paul L. C. Torremans, Aaron Perzanowski, Jörg Reinbothe, Silke von Lewinski, Eleonora Rosati, Cathrine Seville. A magyarok között első sorban Boyhta György, Ficsor Mihály, Faludi Gábor, Gyertyánfy Péter Grad-Gyenge Anikó, Mezei Péter, Pogácsás Anett és Legeza Dénes were cited.

The dissertation focuses on two economic rights, the right of reproduction and communication to the public. These two set of rights are mutually related, regarding some

aspects of online uses, they cannot be separated from each other. If I separated one of them, I would miss to understand the problems.

With regard to the supranational character of the Internet, I started my research by analysing the relevant International norms which is then followed by the copyright regimes of the United States and the European Union, as well as the Hungarian. Where it necessary copyright of different other states, such as Germany, the United Kingdom or Spain are also analysed.

The text of legal norms were examined by the doctrinal method. According to Hutchinson this tool is primary for every lawyer when they are willing to identify, analyse and synthesize the relevant law. Arguments are deduced from particular fundamental principles, legal resources and court decisions, as well as the commentaries and professional opinions of legal scholars.[1]

The legal regime of the United States and the European Union are analysed separately. The reason is that the U.S. and the European Union are roughly similar with regard to their economic and market power. In the meantime they are the biggest producers of copyright protected contents and other subject matters. On the other hand, due to the different historical development of the copyright regimes, they regulate differently the particular copyright questions. Thus comparing the norms of the two legal systems and drawing conclusion from the comparison is reasonable.

To the task of the comparison the comparative legal method is a useful tool.[2] The choice of method rests upon the argument of van Hoecke. If we are willing to analyse an overarching phenomenon, awareness of the national legal system is essential.[3] During the harmonization of laws of the member states of the European Union the fact that the member states regulate differently similar legal questions, causes difficulties in the interpretation.[4] Comparative method in the activity of the European Court of Justice is also inevitable due to the fact that the judges are coming from different legal cultures, so it is advisable during the application of the legal norms of the European Union, if the current legal debate is analysed within the legal

[1] HUTCHINSON, Terry: Doctrinal research: Researching the jury. In: WATKINS, Dawn – BURTON, Mandy (ed.): Research Methods in Law – Second Edition, Routledge, London and New York, 2018. p. 13-14.
[2] SAMUEL, Geoffrey: Comparative law and its methodology. In: WATKINS, Dawn – BURTON, Mandy (ed.): Research Methods in Law – Second Edition, Routledge, London and New York, 2018. p. 129.
[3] VAN HOECKE, Mark: Methodology of Comparative Legal Research. Law and Method, 2015. p. 1.
[4] SEVILLE, Cathrine: EU Intellectual Property Law and Policy – Second Edition. Edward Elgar, Cheltenham UK – Northampton, MA, USA, 2016. p. 23.

framework of the given member state or states. Rules of these member states are taken into consideration when the actual legal debate is on the table. [5]

The comparison itself presupposes such an intellectual activity, during which the two norms and their systems are being compared. Comparison of the phenomena and rules set next to each other can only be successful, if their function are equal.[6] At the end of the comparison a comparing reflection to the studied problem should be drawn, thus the relevant elements of the foreign regulation have to be stressed out so that the adequate conclusion can be drawn. If it is needed, as a result of the comparison, the local legal norms might fall under revision.[7] *Functionality* has a distinguished importance, as only such phenomena can be compared successfully, which fulfil slightly similar functions.[8] I suppose, copyright, according to its function, within the borders of the given geographical area (North America and Europe) is functionally similar, accordingly it fits the requirements of the comparison.

If the role is similar, the regulation is slightly different. The main difference between the United States' copyright and the European legal approach is that while in the United States authors and related right holders are protected so as the *„science ad the useful arts"*, in authors' rights regimes works of the creative activities and the creators enjoy exclusive protection regarding their economic and moral rights. The protection of moral rights is also different in the two studied legal regimes. While it strongly prevails in Europe, in the United States the emphasize lays rather on the exclusivity of economic rights. The legal status of the related right holders is also different. The terminological difference between the communication to the public and the public performance is also essential,[9] so as the transferability of economic rights.[10] In the field of limitations and exceptions the fair use doctrine is the biggest difference.[11]

The description of the dogmatic foundations of the economic rights follows the chronological order with regard to the subalteration of the international treaties and European norms. It also symbolizes the historical approach of the different steps of the legislator and the

[5] BÓKA János: Az összehasonlító módszer az Európai Unió Bíróságának gyakorlatában. In: HOMOKI-NAGY Mária (ed.): Acta Universitatis Szegediensis: Acta juridica et politica, Tom. 77. Fasc. 1-45/2014. Ünnepi Kötet Dr. Bodnár László egyetemi tanár 70. születésnapjára, Szeged, 2014. p. 57.
[6] VERES Orsolya: Bevezetés az összehasonlító jogba. Kondrad Zweigert és Hein Kötz megközelítésében, azonos című munkájuk alapján. In: Jogelméleti szemle, 4. sz. 2005. (http://jesz.ajk.elte.hu/veres24.html#_ftn1 Downloaded: 2018. január 20.).
[7] Ibid.
[8] Uo. Vö. VAN HOECKE, 2015. p. 9-10.
[9] MEZEI Péter: Bevezetés az összehasonlító szerzői jogba. In: LEGEZA Dénes (ed.): Szerzői jog mindenkinek. Szellemi Tulajdon Nemzeti Hivatala, Budapest, 2017. p. 311.
[10] Ibid. p. 315.
[11] Ibid. p. 317-318.

technology which triggered the legal response. I consider it inevitable to understand the steps of the legislation towards that legal environment which prevails today.[12]

In the case of copyright law it is highly important to study the operation of the body of law in the given framework, where the particular social, economic and technological point of contingencies are well perceptible.[13] Therefore the legal norms were tried to be understand according to the law-in-context method in the given social-economic system, which system challenged the current copyright regime.[14] Notably the different ways of digital distribution and their assessment by the judiciary with special regard to the different forms of liability. The dogmatic analyzation of the economic rights should not mean the end of the research, so it is important to reveal the relevant case law and the broader economic, social context.

3. Structural overview of the dissertation

The dissertation can be divided according to the following:

I. *Introduction – Legal and social context of the copyright and the technological challenges:* origins of copyright, theoretical foundations, as well as its relation to the social and technological development, with special regard to two revolutionary inventions; the printing machine and the Internet.

II. *Regulation of the right of reproduction and communication to the public in the international copyright treaties and the European Union*: analysing the international, European, American and Hungarian legal norms of the right of reproduction and the right of communication to the public, with special regard to the questions of digital reproduction.

III. *The system of limitations and exceptions regarding the right of reproduction and communication to the public:* analysing the limitations and exceptions to the right of reproduction and communication to the public, with special regard to the temporary acts of reproduction.

IV. *Liability for online copyright infringements:* analysing the different types of intermediaries, as well as their liability for copyright infringements, with special

[12] VAN HOECKE, 2015. p. 18.
[13] COWNIE, Fiona – BRADNEY, Anthony: Socio-legal studies – A challenge to the doctrinal approach. In: WATKINS, Dawn – BURTON, Mandy (ed.): Research Methods in Law – Second Edition, Routledge, London and New York, 2018. p. 40.
[14] Ibid. p. 30.

regard to the concrete measures, such as blocking access to infringing websites, notice and takedown.

V. Summary.

II. Thesis

1. Right of reproduction in the online environment

Digitization and the Internet separated from each other the market of physical and digital copies. Dissemination of copyright protected goods has been divided. Fixed and than reproduced, physical copies of works were sold or lent based on the right of distribution. The ownership of immaterial goods on the other hand was not transferred to the end user, lending was also impossible. Instead the use aims at the making the work perceptible to the end user, who can be present at the place of the use (public performance) or in the distance, as the member of the distant public (communication to the public).[15]

As it was the case with other economic rights, the scope of the right of reproduction broadened from time to time. The term of copy and reproduction broadened as new technologies followed each other during the 20th century, such as gramophone, tape recorder, cassette, video recorder and video cassette, camera, photocopier, CD and DVD. The evolution and spread of technologies and data carriers of the last century did not, or at least not directly concerned the access to the works and the information they incorporated. By exercising the right of distribution physical copies got out the authority of the right holders. End users were entitled to dispose of them. The enjoyment of the works was not hindered either in time or place.[16]

In the online environment everything is different. In case of internet-based services the selection, modification and reproduction of the information is automatic. During running their personal computer and accessing the Internet, end users carry out a lot of automatic procedures which can be related to the reproduction of protected works, at least temporarily, in the RAM memory or permanently in the hard drive. On the other hand the temporary acts of reproductions does not result in physical copies, because the work itself, which was partially and temporarily

[15] WESTKAMP, Guido: Transient copying and public communications: The creeping evolution of use and access rights in European copyright law. Georg Washington International Law Review, Vol. 36. No. 5, 2004. p. 1069.
[16] SPOOR, Jaap H.: The Copyright Approach to Copying on the Internet: (Over)Stretching the Reproduction Right? In: HUGENHOLTZ, P. Bernt: The Future of Copyright in a Digital Environment. Kluwer Law International, The Hague, London, Boston, 1996. p. 76.

reproduced,, was immaterial.[17] It is also true on the other hand that if the fixation or reproduction occurs in the hard drive, the copy itself will permanently be reproduced on a physical data carrier. The biggest questions however are being risen by the temporary acts of reproductions necessitated by the data transmission.

So it seems that the oldest economic right of copyright, the right of reproduction is in overlap with the right of communication to the public in case of digital exploitation. Accessing the work and the tools which makes the access possible necessitate the temporary reproductions of the given work.[18]

Digital and temporary reproduction of copyright protected works exceeded the amount of copies which were possible to be made by the earlier technologies of the 20th century. Lobbyist groups of the relevant stakeholders therefore aimed at finding solutions for the problems caused by the digital reproduction in order to keep under control the dissemination of their creations. It is beyond doubt that the transmission of copyright protected goods in the Internet should fall under the authority of the right holders. On the other hand, transmission over electronic networks, as well as accessing data requires the reproduction of the content. Thus communication to the public should incorporate the right of reproduction when it takes place for the sake of the communication to the public and the copies were made during the process last only for a limited period of time.[19]

Maintaining the traditional concept of reproduction right takes place in such an environment where the access to goods and copies barely follows the traditional value chains. End users are able to access more and more content online, while they are purchasing less and less physical copies. Thus internet-based online services are expanding at the expense of the market of physical copies. The spread of streaming services are becoming stronger and stronger on the market of physical copies. These markets are tried to be protected by the right holders.

Right holders enjoys significant advantages over the dissemination in the online sphere. Their positions are strengthened by the broad concept of reproduction right, effective technological measures and licensing practices. Based on these tools they can effectively control and limit the access to the protected contents. Such an overregulation is not present on the market of physical copies of works because the limitations and exceptions hinder the right holders to exceed the scope of protection

[17] SPOOR, 1996. p. 67. Vö. YU, Peter K.: The copy in copyright. In: LAI, Jessica C. – DOMINICÉ, Antoinette Maget: Intellectual Property and Access to Im/material Goods, Edward Elgar, Cheltenham, 2016. p. 88-89.
[18] PIHLAJARINNE, Taina: Should We Bury the Concept of Reproduction – Towards Principle-Based Assessment in Copyright Law? International Review of Industrial Property and Copyright Law 48(7) November 2017, p. 959.
[19] HUGENHOLTZ, 1996. p. 102.

Accordingly, the right of reproduction has been broadened in the last couple of decades due to the technological development. This evolution clearly appears in the international copyright treaties, as well as in the copyright law of the European Union. The original concept of the right of reproduction was not changed after the digitisation and the advent of the Internet. The WIPO Internet Treaties expressly declare that the digital copies fall under the scope of the right of reproduction as it is understood according to the Berne Convention.

2. Right of communication to the public as the dominant economic right regarding online uses

Dissemination of copyright protected goods is based on the right of communication to the public. The communication to the public aims at the immaterial exploitation of the work, such as public performance or communication to the public. The communication takes place by using a technological tool which can be broadcast, transmission by wire or wireless means or by making the work available to the public. The first technology for the immaterial exploitation was the radio, then the television, the satellite and the Internet are also a possible forms of immaterial dissemination. Prior to these inventions it was also possible to exploit the works without being copied on a physical data carrier. It was the public performance which aimed at the audience present at the place of the performance. Due to the radio the performances extended the limited capacity of theatres and became accessible to the wider public. Radio and then television broadcast and cable retransmission got the program carrying signals to millions of households. The spectrum of the economic exploitation of the works broadened.[20]

Technological development also expanded the scope of the right of communication to the public. As every single act of communication to the public is protected, even if they are a part of a bigger and more complicated chain of distribution. Hence every act of communication have to be authorised by the right holder. Economic exploitation of the work is only possible if the right holder has exclusive control over the right.[21]

Internet made it relevant to extend the scope of communication to the public, which was earlier rather fragmented. The ambition was to bring together the right of broadcast, cable retransmission and Internet-related uses under one broad right. The biggest difference between

[20] GONDOL Daniella – NAGY Balázs – TIMÁR Adrienn: 6. A szerző jogai. In: LEGEZA Dénes (ed.): Szerzői jog mindenkinek. Szellemi Tulajdon Nemzeti Hivatala, Budapest, 2017. p. 116.
[21] PILA, Justine – TORREMANS, Paul L. C.: European Intellectual Property Law. Oxford University Press, Oxford, 2016, 2016. p. 311.

the Internet and the other types of communications is that the Internet makes the two-way communication possible. The broadcast allowed only one-way communication, the end users were not able to influence the access of the work. In the Internet it is slightly different. The users are able to decide when and where they want to access the content on the given website. This characteristic of the communication was recognized by the right of making available to the public which was inserted into the wide concept of communication to the public by the WIPO Internet Treaties. This approach was later adopted by the InfoSoc Directive. As the exploitations through the Internet are considered to be services, the exhaustion of the right of distribution does not apply to such uses.

3. Partially de-emphasized right of reproduction – The exception of temporary reproduction

Applying the right of reproduction to the digital environment created a paradox. If we considered the original concept of the reproduction, the right holders have to be able to control every uses of the work. The exercise of this right in the online environment came into an overlap with the right of communication to the public. It does not mean of course that the right of reproduction should not have the raison d'etre when permanent copies are made on the hard drive of the computer, but during browsing or surfing the Internet within the RAM memory and on the screen temporary copies are made. Therefore these acts of reproductions should fall under the scope of limitations and exceptions as they are integral and essential parts of a technological process.[22]

The problem with the RAM copies is relevant not only in the Internet. It is essential in such uses like installing a software from a physical data carrier or downloading from the Internet and then installing it. It is clear that such uses are constituting permanent copies, therefore the right of reproduction should prevail. But running an already installed program also creates temporary copies in the memory of the computer. These copies are functional whit the only single purpose of facilitating the inevitable use of the computer program. At the end of the technical process, the copy will be erased. Retrieve the copy from the memory and preserve the copy requires more than simple knowledge of an end user.[23] It is also true when during the use of the work can be perceptible visually on the screen of the computer. Furthermore, in the

[22] PILA – TORREMANS, 2016. p. 304.
[23] LITMAN, Jessica: Digital Copyright. Prometheus Books, Amherst, New York, 2001. p. 27.

memory only a small portion of the work is being copied which are needed at the given moment of the technical process.[24]

At this point the copyright indeed exceeds the original scope of protection, which was originally to stimulate the intellectual creating and on the other hand to facilitate access to the works and other subject matters. For the proper, lawful use of the work the user does not need the permission of the right holders because his act does not harm the interests of the right holders or poses a threat to the economic and moral interests. Reading a book or listening to a music does not require further acts of reproductions or other exercise of economic rights, at least if we are talking about physical copies. This is not the case regarding the digital uses, which necessitate at least the temporary reproduction. This fact was recognized in favour of the right holders in the WIPO Internet Treaties and later in the European copyright regime as well. To avoid the undesirable overextension of the reproduction right, the European legislator introduced an obligatory exception in the InfoSoc Directive in Article 5 Paragraph 1 for the temporary acts of reproductions in order to avoid the unreasonable interference with the lawful uses.[25]

4. Legal status of intermediaries – Liability for online infringements

It was obvious in the 1990s that the right holders and other actors of the online environment require the clear and regulated relations, as well as the legal certainty.[26] The representatives of the content industry – authors and related right holders – wanted to maintain the original copyright norms and the traditional market relations in the onlie environment. But not only them are present in the Internet. Billions of end users wish to access contents in the Internet. Their wish meets the interests of third parties whose – sometimes illegal – activity aims at the dissemination of digital contents. The circle of online content providers or intermediaries can be divided up into to more groups. Some of them are operating legally, others are willingly not asking for permission for the uses and not paying remuneration for the right holders.

The inventory of the right holders against illegal activities also differentiated in the last two decades. In Europe the E-commerce Directive, the InfoSoc Directive, the Enforcement

[24] PERZANOWSKI, Aaron: Fixing Ram Copies. Northwestern University Law Review, Vol. 104, No. 3, p. 1096.
[25] VON LEWINSKI, Silke – M WALTER, Michel: Information Society Directive. In: M WALTER, Michel – VON LEWINSKI, Silke (ed.): European Copyright Law – A Commentary. Oxford University Press, Oxford, 2013. p. 968.
[26] SZINGER András – TÓTH Péter Benjamin: Gyakorlati útmutató a szerzői joghoz. Novissima Kiadó, Budapest, 2004. p. 204.

Directive and the CDSM Directive also contain several rules regarding the different type of intermediaries and their liability for online infringements as well as limitations on their liability and tools against infringing activities. The liability is an important question because in most of the cases the intermediaries are innocent third parties but their networks and services are used to carry out infringing activities. Taking a look at the development of the case law of the European countries and the European Court of Justice, one thing is obvious. Namely the awareness or knowledge about the infringement. If the intermediary is able to prove that it did not have actually knowledge about the infringement and after gaining information about the actual infringement acted expeditiously to remove the content or make it unavailable, the liability can be exempted. The knowledge element caused serious debate because it is against the absolute and objective structure of the copyright law.

Legislative steps aimed at regulating the legal status of the intermediaries. This process has not stopped yet. The legislative bodies of the European Union are working on the Digital Single Market strategy, which contains new rules regarding the internet service providers and their liability for the end users' unlawful activities. Among the achievements of the European copyright law the adoption of the definition of different service providers, the rules on their liabilities and the particular measures against infringing contents, such as notice and takedown or blocking access to infringing websites can be mentioned.

5. Summary

In legal relations of copyright, it is always important to keep up the fair balance among the relevant stakeholders, the commercial users, end users and internet service providers. Technological development continuously challenges the copyright regimes, the creators and other right holders. The international and European legislators tried to address the problems by adapting technology neutral solutions which are able to handle such technologies which are not yet present but might be developed in the future. One of the result of the endeavour to reshape copyright law for the digital age was the recognition of the right of reproduction in case of digital copies and in the meantime the limitation of this right by adopting the exception of temporary reproduction within the framework of the InfoSoc Directive. The other achievement was the adoption of the broad right of communication to the public which contains the making available to the public right for the internet-related uses.

The right of reproduction and communication to the public is in overlap when it comes to such online uses like streaming or other types which does not require the permanent

reproduction of the works. The remuneration of the creators and the exploitation of the economic advantages of the creations are connected to the right of communication to the public, not the right of reproduction and the right of distribution. All this means that the right of reproduction stays in the background and serves another act of exploitation, namely the right of communication to the public. The moment when the work is communicated to the public is the point when the right holders can grant permission and ask for remuneration and not the moment when the copies are made.

New business models which were developed to make available copyright protected subject matters on their networks necessitated new tools of law enforcement, such as notice and takedown or block access to infringing materials and websites or content filtering. These measures might threaten the fair balance by threatening for example the freedom to conduct a business, the freedom to access information; therefore, the adequate limitation of the liability was necessary which was adopted by the European and the American legislators as well.

My dissertation dealt with two economic rights, the right of reproduction and communication to the public which are deeply affected by the online uses. I tried to enumerate every argument in favour of the wide scope of protection. At the same time, I also tried to reveal those reasons which lead the legislator the adopt the above mentioned forms of protection. It is beyond doubt that the high level of protection is the fundamental and essential element of a well-functioning copyright system, as well as a democratic society, as it is able to incentivise creation. The analysed problems and their solutions make other approaches possible, such as market-based, technical or social approaches. In my dissertation I also tried to reveal as many from these aspects as possible, although it is clear that even though the Internet is still posing threat to the interests of the relevant stakeholders, the copyright itself, at least in legal sense has not weakened. Actually, due to the control over legal channels of digital distribution it has become stronger.

Further important questions are there to explore with special regard to the original role of copyright law, the user rights, the legal status of intermediaries and the Artificial Intelligence, as well as Big Data and datamining. The efforts of the European Union to create a well-functioning Digital Single Market is also a possible field of future research.

List of relevant publications

1. „Hozzáférés megtagadva" – a weboldalak blokkolása, mint a jogérvényesítés lehetséges eszköze I. rész, *Iparjogvédelmi és Szerzői Jogi Szemle*, 11. (121.) évfolyam 2. szám, 2016. p. 23-51.
2. „Hozzáférés megtagadva" – a weboldalak blokkolása, mint a jogérvényesítés lehetséges eszköze II. rész, *Iparjogvédelmi és Szerzői Jogi Szemle*, 11. (121.) évfolyam 3. szám, 2016. p. 71-99.
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