

COPYRIGHTS AND NEIGHBORING RIGHTS
IN
OUTPUTS MADE BY OR MADE BY MEANS OF AI SYSTEMS

Survey Results Report

AI and 3D Sub-Committee of the INTA Copyright Committee

June 2023

Tobias Kempas	Advokatfirman Vinge KB
Ulla Allgayer	Alpspitz IP
David Byer	K & L Gates LLP
Nate Garhart	Farella Braun + Martel
Laura A. Genovese	K & G Law LLC
Nikola Kliska	Karanovic & Partners
Catherine Lovrics	Marks & Clerk Canada
Diana Mansour	Gardiner Roberts LLP

Acknowledgements

This Committee Report was produced by the Artificial Intelligence, 3D and Copyrights Subcommittee. Special thanks to all the members of the said committee as well as to INTA members who contributed strongly to the production of this report, also acknowledged hereafter.

Disclaimer

All information provided by the International Trademark Association in this document is provided to the public as a source of general information on copyrights and neighboring rights in outputs made by or made by means of AI systems. In legal matters, no publication, whether in written or electronic form, can take the place of professional advice given with full knowledge of the specific circumstances of each case and proficiency in the laws of the relevant country. While efforts have been made to ensure the accuracy of the information in this document, it should not be treated as the basis for formulating business decisions without professional advice. We emphasize that intellectual property laws vary from country to country, and between jurisdictions within some countries. The information included in this document will not be relevant or accurate for all countries or states.

1. INTRODUCTION

The Fourth Industrial Revolution has only just begun, but it has already brought several significant and visible changes. The exponential development can largely be attributed to advances in Artificial Intelligence ("AI"). AI is having a major impact on almost every aspect of society. Using machine learning and advanced algorithms, it is possible to produce highly sophisticated AI systems, which can be utilized in virtually all creative and industrial fields. For example, today's AI systems can generate music, innovations, literature, designs, news, visual arts, and theatre plays. In the long term, it is not unlikely that we will have AI systems with very high intelligence, far surpassing most human cognitive abilities.

Inevitably, considering that AI blurs the boundaries between the physical, digital, and biological worlds, AI intersects with the intellectual property law framework at several different points. For instance, robotic artists have been involved in various types of "creative" processes for a relatively long time. AI systems are being used to generate all manner of literary and artistic content, including translations, music, poems, scripts, novels, photos, and paintings. AI systems are also having a major impact on journalism. One example of AI in relation to music is the AI system AIVA (Artificial Intelligence Virtual Artist). AIVA uses an ANN (Artificial Neural Network) with multiple hidden layers. The ANN has been trained with input data in the form of approximately 30,000 historical pieces of music, in different periods and styles. In this way, AIVA has been trained to identify patterns and correlations in the music and enables AIVA to autonomously compose new music in many styles. In 2021 and 2022, many noteworthy AI systems were launched (e.g., DALL·E, GLIDE, DALL·E 2, FN MEKA, Imagen, Midjourney, Stable Diffusion, PromptoMANIA, Prime Voice AI and Chat GPT).

The public accessibility to Chat GPT in late 2022 has generated an intense wave of publicity and commentary about the existence and handling of AI and AI-generated works.

The legal and general press are filled with discussions of the economic, cultural, and legal consequences of AI-generated works. Government agencies in several countries have taken up the issue, and some court cases have been filed. The legal landscape is rapidly evolving and will result in changes and clarifications of the legal status of AI-generated and AI-assisted works.

From a copyright law perspective, AI technology developments raise several questions. The definition of “work” in the Berne Convention follows a general requirement that works be produced within the “literary, scientific, or artistic domain”. Many AI productions resemble typical works and obviously belong to “the literary, scientific or artistic domain”. This fact alone, however, does not necessarily mean that such products are eligible for copyright protection.

Under the copyright laws of many jurisdictions, a significant difference seems to be made between *AI-generated* outputs (outputs generated for which no human author exists, the only human contribution being “pressing the button”) and *AI-assisted* outputs (outputs generated by one or more AI systems as tools). In most jurisdictions, *AI-generated* outputs are not eligible for copyright protection. Such “authorless” outputs however might be protected under neighboring rights or other rights.

In 2022, the AI and 3D Sub-Committee conducted a limited study to examine whether outputs made by AI-systems (*AI-generated* outputs) and/or outputs made by means of AI-systems (*AI-assisted* outputs) are eligible for copyright protection and/or protection under certain neighboring rights in different countries. The study was worldwide, covering 48 countries. A total of 71 respondents helped with their inputs and responded to a short questionnaire. The questionnaire is attached as Appendix 1.

A developing and critical inquiry that is not explored in depth in this report is the level of human participation involved in creating *AI-assisted* outputs, and how different levels of human involvement may affect the copyrightability analysis. As illustrated in the U.S. Copyright Office’s February 21, 2023 decision concerning the comic book *Zarya of the Dawn* and its March 16, 2023 Copyright Registration Guidance: Works Containing

Material Generated by AI, it is possible that even extensive human interaction with and instruction to an AI system may not reach the quantum of originality and human authorship required for copyright to attach to AI-assisted output. These concepts continue to be tested and explored.

For the purposes of our study, we used the key part of a definition originally proposed by the High-Level Expert Group on Artificial Intelligence (see Appendix 1).¹ Thus, we defined “AI systems” as *“software (and possibly also hardware) systems designed by humans that, given a complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behavior by analyzing how the environment is affected by their previous actions.”*²

The survey results were split into two categories, namely:

1. AI-generated output which refers to output generated by an AI system without any human authorship; and
2. AI-assisted output which refers to output by one or more human authors using one or more AI systems as tools.

The survey results are summarized below.

2. AI-GENERATED OUTPUT

2.1 Copyright

2.1.1 General conclusions

¹ The High-Level Expert Group on Artificial Intelligence is an independent group of experts set up by the European Commission in June 2018.

² High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI*, Brussels 8 April 2019.

The creation/generation of output by autonomous artificial intelligence systems (also known as “generative AI” or “AI-generated output”) directly raises the important legal question of copyrightability. Is such output legally protected under the existing statutory copyright rules? Should such output be protectible? Our survey has explored the question of whether human input (beyond “pressing the button”) is required for copyright protection of AI-generated output.

We found that, with the exception of the United Kingdom, Ireland, South Africa, and Ukraine, all reporting countries currently either require an actual human creator or have not dealt with the issue of copyright protection for AI-generated output.

Three of these four jurisdictions have legislation that specifically acknowledges copyright in “computer-generated works” in circumstances such that there is no human author of the work in a traditional copyright sense. The legislation in these countries deems the author to be the “arranger”, or the person by whom the arrangements necessary for the creation of the output are undertaken. It is noteworthy that human intervention continues to be acknowledged, including apparently with respect to originality. That said, the approach to assess originality is not settled, and the nature and degree of human intervention that results in originality remain unsettled and vary by jurisdiction. One of these four countries (Ukraine) offers a *sui generis* right (similar to copyright) to protect non-original output created by software (including AI systems).

Moral rights are similarly akin to but separate from copyright and are traditionally considered to be inalienable rights of the author. While jurisdictions vary on the moral rights recognized, they generally encompass two main components: the right of paternity (i.e., attribution), and the right of integrity (i.e., right to prevent prejudicial distortions of a work; e.g., to control authorized derivatives from destroying or misrepresenting the character or spirit of the artist’s work).

Because moral rights are usually considered inalienable to the author and focus on protecting the inherent rights of personal character, it seems unlikely that moral rights will be recognized where the individual’s character is not directly associated with the creation

of the work. However, in those countries where human authorship is not required for copyright protection, it is generally unsettled whether moral rights would be recognized in the copyright holder. In the UK, though, the right to attribution is expressly excluded from any moral rights in computer generated works.

2.1.2 Copyright in “computer-generated works”

As indicated above, the copyright laws of most countries do *not* provide that fully computer-generated works may enjoy copyright protection. Set forth below is a short summary of the *lex specialis* provisions in Ireland, South Africa and the UK. Although these three countries recognize moral rights in some form, whether the deemed “author” of AI-generated works may be able to claim moral rights is unsettled.

(i) IRELAND

Section 2(1) of the Irish *Copyright and Related Rights Act 2000* (CRRRA) defines a computer-generated work as “generated by computer in circumstances where the author of the work is not an individual.” It also defines the “author” of a computer-generated work as “the person by whom the arrangements necessary for the creation is undertaken”. This means that where a work is generated by a computer program or machine, the copyright protection vests in the person who arranged for the machine to create that work. If the deemed author is an employee acting within the scope of employment, the employer is recognized as the deemed author.

Originality is required for the creation to be protected (S. 17(2) of the CRRRA). The EU test for originality, which requires non-copying and the “intellectual creation” of the author, applies in Ireland. The extent to which AI-generated outputs can be original has not been explored in Irish case law, but the test suggests that protection might require a human creator. This potential ambiguity remains to be resolved.

The copyright rights are granted for 70 years from the date on which the work is first lawfully made available to the public.

There are no reported cases in which moral rights have been recognized for computer-generated work. The moral rights of paternity and integrity are expressly granted to some authors, which could potentially include deemed authors of computer-generated works as defined in the Irish copyright legislation.

(ii) SOUTH AFRICA

South Africa's Copyright Act recognizes that a literary, dramatic, musical, or artistic work or a computer program may be computer-generated. A computer-generated creation is made by the operation of a computer where it is not possible to attribute the resultant work directly to the efforts of any individual. The "author" of a literary, dramatic, musical or artistic work, or a computer program which is computer generated is the person by whom the arrangements necessary for the creation of the work were undertaken.

Originality is required, and the output must be the product of the author's own labor and effort. The work need not be novel but a certain degree of judgment, selection, skill and effort from the person who created the work is required. This requirement of originality suggests that a human author must be involved to some extent, though the requirement does not appear to go so far as to require human creative expression/creativity. However, human intervention is required.

The copyright rights are granted for 50 years from the end of the year in which the work is made available to the public with the consent of the owner of the copyright or is first published, whichever comes first. If neither of these events occurs within 50 years of creation, the copyright runs for 50 years from the end of the year of creation.

Moral rights of the author are recognised for the right to claim authorship of the work (being a literary, musical or artistic work, a cinematograph film, or a computer program) and to object to any distortion, mutilation or other modification of the work if it would be prejudicial to the honour and reputation of the author.

(iii) UNITED KINGDOM

The UK *Copyright, Designs and Patents Act 1988* (CDPA) provides copyright protection for literary, dramatic, musical, or artistic works generated by computer in circumstances such that there is no human author of such works (s178 CDPA). The CDPA designates the legal “author” of computer-generated work as “the person by whom the arrangements necessary for the creation of the work are undertaken.” (s9(3) CDPA). The author of such work must also be a “qualifying person” under s154 CDPA. If the deemed author of a creation is an employee acting within the scope of employment, the employer is the “author.”

UK law draws a distinction between “creation” and “authorship.” The “creator” of a work is the computer/AI that generates the work, and the “author” is the person who made necessary arrangements for the creation of such work.

Originality is required for copyright protection. Under UK law, the test for originality is that the work must result from “sufficient skill, labour and judgment.” It is unclear how the test for originality will apply to computer-generated works. Once the right is established, it lasts 50 years from the date the work is made.

English law (CDPA 1998) expressly states that the rights of identity and to object to derogatory treatment do not apply to computer programs or computer-generated works. Thus, to the extent that moral rights exist in computer-generated creations, they might be limited only to the right to object to false attribution.

2.2 Neighboring rights

2.2.1 Introduction

According to the “*WIPO Glossary of Terms of the Law of Copyright and Neighboring Rights*”, the term “neighboring rights” (and its synonym “related rights”) means “the rights of performers in respect of their performances, the rights of producers of phonograms in respect of their phonograms, and the rights of broadcasting organizations in respect of

their broadcasts”. According to the Glossary, the broader meaning of the expression extends to the rights of publishers in the typographical arrangements of their published editions, and of the *sui generis* rights of makers of databases.

According to the law of some jurisdictions, the term “neighboring rights” also includes additional rights, such as the related right for press publishers in their publications and the related right for photographers to their non-original photographic pictures.

Typically, the law of related rights deems that certain objects merit legal protection although the objects are not copyrightable “works” in the strict sense. Hence, neighboring rights are related to the protection of works of authorship under copyright.

The term “neighboring rights”, as used in this report, should be understood in the broadest possible way.

2.2.2 *General conclusions*

In countries where AI-generated outputs are not copyrightable, such outputs could potentially be protected under “neighboring rights,” also sometimes referred to as “rights neighboring to copyright.” Certain neighboring rights are sometimes also referred to as *sui generis* rights, to clarify that the rights are different from copyrights.

Neighboring rights are those rights that grant protection to a non-author third party involved in the work, or to a creator of otherwise non-copyrightable works, such as in the following examples:

- To producers of films and/or sound recordings to control the reproduction of those creations;
- To broadcasters to control the use of their programs;
- To performers (actors, singers, musicians, dancers, etc.) to control the exploitation of their performances.
- To the creators of databases, which databases do not meet the requirement of originality to qualify for copyright protection.

Without the human-authorship requirement of copyrightability, neighboring rights could exist where the work is not eligible for copyright protection. Indeed, protecting uncopyrightable works is one of the purposes of recognizing such neighboring rights.

In those countries where human authorship is not a prerequisite for copyrightability, one would expect neighboring rights to be available to those qualifying third parties.

As noted above, in those countries that recognize rights of an arranger of computer-generated works, and deem authorship, it remains to be seen whether and how moral rights may arise, if at all. Again, given the nature of moral rights, there appear to be inherent challenges in the recognition of such rights of a deemed author of a computer-generated work.

2.2.3 Sui generis rights in computer-generated output

Of the countries that participated in our study thus far, Ukraine is the only country that has introduced in its laws explicit rules on *sui generis* rights in computer-generated works. Hence, Ukraine recognizes exclusive rights in AI-generated output seemingly without the requirement of human intervention. Ukrainian law offers a *sui generis* right to protect non-original subject matters created by software (including AI), i.e., outputs which differ from other works of a similar type and are created without the participation of humans. Rights to such works arise at the moment of their creation.

While tangible *sui generis* rights to such output include the right to use and the right to authorize or prohibit third-party use of the output, there are no intangible (moral) rights to such output.

Objects generated by computer programs are protected by *sui generis* rights for 25 years, and such rights belong to the owner or licensee (legitimate user) of the corresponding software that provided such generated work.

Ukrainian law specifies that works created by individuals using computer technologies are considered original objects generated by a computer program.

2.2.4 *Term*

The terms of protection of neighboring rights and moral rights do not necessarily track the term of copyright protection and vary from one right to the other and from jurisdiction-to-jurisdiction.

3. AI-ASSISTED OUTPUT

3.1 Introduction

As described in Section 1 (Introduction) above, the term “AI-assisted” refers to outputs generated by one or more human authors using one or more AI tools.

Generally, whether copyright protection may be available in AI-assisted works depends on whether there is human contribution that meets the local standard of originality. As such, copyright protection for AI-assisted works appears more likely to arise than does copyright protection for works that are generated autonomously by AI, or generated with minimal human contribution. Conceptually, where AI is used as a tool, resource, mechanism or means for human creation and to facilitate human expression, copyright is more likely to be available for the AI-assisted work; whereas, where the AI-assisted work is the result of the AI without, or with limited, contribution by a human, the work may not be protectable.

3.2 Copyright

All countries offer copyright protection. While copyrightability requirements may vary to some degree from country to country, in most countries one of the common requirements of copyright is “originality.” “Originality” requires a human to be involved.

For instance, it follows from settled case law of the EU that, if a subject matter is to be capable of being regarded as original, it is both necessary and sufficient that the subject matter reflects the personality of its author, as an expression of his/her free and creative choices. In the US, following the *Zarya of the Dawn* ruling, the U.S. Copyright Office

(USCO) issued registration guidance on March 16, 2023 requiring applicants to specifically disclose the inclusion of AI-generated content on the application itself so that the extent of human authorship can be assessed. In this guidance, USCO reiterates that copyright can only protect products of human creativity, and that the word “author” under US law excludes non-humans.

The Berne Convention mandates that the copyright term extend at least 50 years following the author’s death. In the U.S. the copyright term is longer: 70 years beyond the author’s death, where the author is a known individual, or, for works for hire and anonymous or pseudonymous works, 95 years from first publication or 120 years after creation (in the case of unpublished works). In the EU, copyright protection lasts until 70 years after the author’s death or 70 years after the death of the last surviving author in the case of a work of joint authorship. In Canada, the term of copyright is the life of the author, the remainder of the calendar year in which the author dies, and a period of 70 years following the end of that calendar year; and for anonymous or pseudonymous works (single or joint authorship), until the end of 75 years following the end of the calendar year in which the work is made, or if the work is published before the copyright expires, until the earlier of the end of 75 years following the end of the calendar year in which the first publication occurs and 100 years following the end of the calendar year in which the work was made.

Moral rights are tied to natural persons and extend only during that individual’s lifetime.

3.2 Neighboring rights

The general principles discussed concerning neighboring rights (cf. Section 2.2 above) apply also to AI-assisted output.

4. CONTEMPORARY DEVELOPMENTS OF INTEREST

Copyright protection may be more likely to be found in AI-assisted works that are compilations than in artistic, literary, dramatic works that are not compilations. This is based on developments in the U.S. and Singapore, and appears to be grounded in the

test for originality for compilations, where, for example, originality lies in the selection or arrangement of elements. To date, we have seen such developments in two jurisdictions.

In Singapore, in the case, *Global Yellow Pages Ltd v Promedia Directories Pte Ltd* [2016] 2 SLR 165 at [254]-[256], copyright protection was found in AI generated work. It was held that as long as a human author dictated the final selection of a compilation and exercised authorial choices, and the software program simply implemented the ideas of said human author (i.e., the computer software is seen as no more than a tool like a pen, but the human author remains in control of the program)

In February 2023 the U.S. Copyright Office considered whether a work created with the assistance of the Midjourney AI was copyrightable. The Copyright Office said “no,” since the AI at issue did not render predictable results, and thus the human instructing the AI could not be deemed the “master-mind” behind the resulting images. (*Zarya of the Dawn.*)

Appendix 1

Questionnaire

Copyrights and neighbouring rights in outputs made by or made by means of AI systems

The Artificial Intelligence and 3D Printing Subcommittee of INTA's Copyright Committee is collecting information on the treatment of Artificial Intelligence ("AI") under copyright law, and we would like your help.

When answering the questions below, the concept of AI should be understood as follows:

Artificial intelligence (AI) systems are software (and possibly also hardware) systems designed by humans that, given a complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behaviour by analysing how the environment is affected by their previous actions.

Questions answered by

Full name:

E-mail:

Company / firm / organisation:

Country:

Attribution

Would you like to have your name included as a contributor to the project?

Answer:

Question	Answer
<p>1. Does your country limit copyright protection to items created by humans? Please explain further (examples, registration, etc.) <i>For the purposes of this question, corporate authors are assumed to be human.</i></p>	
<p>2. If your answer to question No. 1 is in the negative:</p> <ol style="list-style-type: none"> 1. To whom/what is copyright attributed? 2. How is the term of copyright calculated? 3. Is there a requirement of originality? If so, how is it assessed? 4. Are moral rights recognised (through copyright or otherwise)? If so, please briefly explain. 	
<p>3. Does your country provide copyright protection for items generated by or by means of an AI system? For example, can AI-assisted outputs (as opposed to fully autonomously AI-generated outputs) qualify as copyright protected works in your country? If your answer is in the affirmative, please describe the conditions on which copyright protection is offered in such context (e.g. by describing the type of human contribution required). Please explain further (registration, etc.)</p>	
<p>4. If your answer to question No. 3 is in the affirmative:</p> <ol style="list-style-type: none"> 1. To whom/what is copyright attributed? 2. How is the term of copyright calculated? 3. Is there a requirement of originality? If so, how is it assessed? 4. Are moral rights recognised (through copyright or otherwise)? If so, please briefly explain. 	

<p>5. Can an AI system be:</p> <p>a) a performer; b) a broadcaster; and/or c) a maker of</p> <p>a performance/sound recording/cinematographic work?</p>	
<p>6. If your answer to question No. 5 is in the affirmative in any respect:</p> <p>a) To whom/what are the exclusive rights attributed? b) How is the term of protection calculated? c) Is there a requirement of originality? If so, how is it assessed? d) Are moral rights recognised (through copyright or otherwise)? If so, please briefly explain.</p>	
<p>7. If there have been any cases to specifically address AI and copyright or neighbouring rights in your country, please provide links and a brief summary here.</p>	
<p>8. If there are any other copyright, neighbouring rights or moral rights issues you wish to note when it comes to AI in your country, please detail them here.</p>	

Appendix 2 List of participating countries and respondents

	COUNTRY	CONTRIBUTOR(S)
1.	Albania	Karanovic & Partners
2.	Argentina	Sebastián Cortina Pablo Wegbraut
3.	Australia	Belinda Breakspear Harriet Young bbreakspear@mccullough.com.au McCullough Robertson Lawyers
4.	Austria	Claudia Csaky c.csaky@grafisola.at GRAF ISOLA Rechtsanwälte GmbH
5.	Bosnia & Herzegovina	PETOSEVIC
6.	Brazil	Pedro de Abreu Monteiro Campos pedro.campos@diblasi.com.br Di Blasi, Parente & Associados Rodrigo Borge Carneiro rcarneiro@dannemann.com.br Dannemann Siemsen
7.	Bulgaria	Dimitar Batakliiev ditimar.batakliiev@petosevic.com PETOSEVIC
8.	Canada	Yann Canneva yann.canneva@langlois.ca Langlois Lawyers

	COUNTRY	CONTRIBUTOR(S)
9.	Chile	Bernardita Torres Arrau
10.	China	Wency Yu wency_yu@broadbright.com Anjie & Broad Mia Piao xiuyu.piao@boip.com.cn Beyond Attorneys at Law
11.	Colombia	Laura Ángel-Jaramillo langel@bc.com.co Brigard Castro S.A.S
12.	Costa Rica	Fabiola Sáenz Quesada fsaenz@consortiumlegal.com Consortium Legal Daniela Quesada Cordero dniela.quesada@garciabodan.com Garcia & Bodan
13.	Croatia	Ivan Kos ikos@petosevic.com PETOŠEVIĆ
14.	Czech Republic	Vojtech Chloupek vojtech.chloupek@twobirds.com Bird & Bird

	COUNTRY	CONTRIBUTOR(S)
15.	Egypt	Junaid Daudpota junaid@daudpota.com Daudpota International
16.	France	Claude-Etienne Armingaud claude.armingaud@klgates.com K&L Gates
17.	Germany	Rainer Böhm rbohm@eisenfuhr.com Eisenführ Speiser Patentanwälte Rechtsanwälte PartGmbB
18.	Guatemala	Maria Fernanda Villagrán Cano fernanda.villagran@garciabodan.com Garcia & Bodan
19.	Hungary	PETOSEVIC
20.	India	Mathews Verghese mathews.verghese@foxmandal.in Fox Mandal & Associates
21.	Indonesia	Chamelia Sari cameljovie@yahoo.com PRAWIRANEGARA Intellectual Property

	COUNTRY	CONTRIBUTOR(S)
22.	Ireland	Gerard Kelly gkelly@mhc.ie Mason Hayes & Curran LLP
23.	Japan	Mitsuhiro Imamura mitsuhiro.imamura@klgates.com K&L Gates
24.	Jordan	Syed Ghayyur Ahmed ghayyura@daudpota.com Daudpota International
25.	Kazakhstan	Aliya Madiyarova aliya.madiyarova@petosevic.com PETOŠEVIĆ
26.	Kosovo	Kujtesa Nezaj-Shehu kujtesa.nezaj@sdpkosove.com SDP KOSOVE
27.	Lebanon	Ali Farooqui intern09@daudpota.com Daudpota International
28.	Macao	Carlos Duque Simões, Partner cdsimoos@dsl-lawyers.com Paulo Rowett, Associate prowett@dsl-lawyers.com DSL Lawyers

	COUNTRY	CONTRIBUTOR(S)
29.	Malta	Luigi Sansone lsansone@salomonesansone.com Salomone Sansone
30.	Montenegro	Nikola Kliska nikola.kliska@karanovicpartners.com Karanovic & Partners
31.	North Macedonia	Zivka Kostovska Stojkovska zivka.kostovska@petosevic.com PETOSEVIC North Macedonia
32.	Norway	Christopher Sparre-Enger Clausen csc@thommessen.no Erle Katrine Sivertsen erk@thommessen.no Uros Baarlid Tosinovic uto@thommessen.no Advokatfirmaet Thommessen AS
33.	Philippines	John Cabilao john.cabilao@bccslaw.com Betita Cabilao Casuela Sarmiento (BCCS Law)
34.	Romania	Aura Câmpeanu aura.campeanu@petosevic.com Mara Marinescu mara.marinescu@petosevic.com PETOSEVIC
35.	Serbia	Nada Milović nada.milovic@petosevic.com PETOSEVIC Nikola Kliska nikola.kliska@karanovicpartners.com Karanovic & Partners

	COUNTRY	CONTRIBUTOR(S)
36.	Singapore	Jevon Louis jevon.louis@shooklin.com Alvin Tan alvin.tan@shooklin.com Shook Lin & Bok LLP (Singapore)
37.	Slovakia	Katarina Ondrovicova katarina.ondrovicova@twobirds.com Bird & Bird
38.	Slovenia	Maja Žnidarič Plevnik and Barbara Mencin slovenia@petosevic.com PETOŠEVIĆ d.o.o.
39.	South Africa	Amina Suliman Amina.Suliman@adams.africa Adams & Adams
40.	South Korea	Hyungji Kim Younsoo Bae Angela Kim angela.kim@kimchang.com KIM & CHANG INTELLECTUAL PROPERTY
41.	Sweden	Tobias Kempas tobias.kempas@vinge.se Advokatfirman Vinge KB Tom Kronhoffer tom.kronhoffer@nextlaw.se Adam Lind adam.lind@nextlaw.se Next Advokater KB

	COUNTRY	CONTRIBUTOR(S)
42.	Turkey	<p>Yasemin Aktas yasemin.aktas@brandit.com BRANDIT LEGAL</p> <p>Hakan Akdag hakan.akdag@intralegal.com.tr INTRALEGAL</p>
43.	Ukraine	<p>Oleh Karpenko oleh.karpenko@petosevic.com PETOSEVIC</p> <p>Ganna Prokhorova prokhorova@mamuny-ip.com Natalia Badora badora@mamunya-ip.com Mamunya IP</p>
44.	United Arab Emirates	<p>Faisal Daudpotafaisal@daudpota.com Daudpota International</p>
45.	United Kingdom	<p>Arthur Artinian Georgina Rigg Aurelia Grubyte arthur.artinian@klgates.com K&L Gates</p>

	COUNTRY	CONTRIBUTOR(S)
46.	United States	<p>Marcella Ballard mballard@venable.com Venable LLP</p> <p>Lynne Boisineau lynne@boisineaulaw.com Boisineau Law</p> <p>Matthew Hintz mhintz@lowenstein.com Lowenstein Sandler LLP</p> <p>Peter Kidd pkidd@amazon.com Amazon</p> <p>Rita Kline rkline@rennerotto.com Renner, Otto, Boisselle & Sklar, LLP</p> <p>Haverly MacArthur haverly.macarthur@arlaw.com Adams and Reese LLP</p> <p>Eric Osterberg eosterberg@osterbergllc.com Osterberg LLC</p> <p>James Weinberger jweinberger@fzlj.com Fross Zelnick Lerhman & Zissu, PC</p>

	COUNTRY	CONTRIBUTOR(S)
47.	Uzbekistan	Umida Solijonova umida.solijonova@petosevic.com PETOSEVIC
48.	Vietnam	Nguyen Tran Tuyen tuyen@lawfirmelite.com ELITE LAW FIRM