



Sustainability and Intellectual Property in Austria

13

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13.1 Introduction

Intangible assets such as patents, trademarks, designs and data are becoming increasingly important in today's knowledge economy. According to the EU Commission's Action Plan on Intellectual Property to strengthen EU's economic resilience and recovery ('IP Action Plan')¹ published on 25 November 2020, IP-intensive industries account for 45% of GDP and 93% of EU exports, while the added value of IP is growing across most European industrial ecosystems. Globally, IP filings are on the rise, as intangible assets become crucial in the global race for technological leadership.² It goes without saying that the success of sustainable economies depends to a large extent on new and innovative solutions. Intellectual property rights, therefore, undoubtedly play an increasingly significant role in sustainable and green businesses.

Although the term sustainability is used as a buzzword for more and more economic sectors, there is still no uniform legally binding definition of it. Nevertheless, in some cases, sustainable economic behaviour is already impacting companies' strategies. For instance, in the real estate industry, compliance with ESG

¹Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Region - Making the most of the EU's innovative potential. An intellectual property action plan to support the EU's recovery and resilience of 25 November 2020, COM(2020) 760 final, CELEX number 52020DC0760.

²https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2187. Accessed 19 November 2022.

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(‘Environmental, Social & Governance’) criteria is considered to be a desirable guiding principle, and in the financial services sector, ecologically sustainable investments are to be promoted through the so-called EU Taxonomy Regulation.³ For the purpose of this report, the term sustainability is used as a common paraphrase of this word and is understood to mean a principle of action for the use of resources, according to which no more should be consumed than can be regrown, regenerated or provided again in the future. Sustainability thus aims to achieve the most resource-conserving and long-lasting effect possible.⁴ In other words, sustainability means that current thinking and actions should improve the living situation of the present generation without worsening the future of the next generation.⁵

13.2 Current Status of Sustainability in Austrian IP Law

13.2.1 Overview

In Austrian industrial property law (patent and utility model law, trademark law and design law) and copyright law, there are no special legal provisions that explicitly deal with the concept of sustainability.

However, this does not mean that industrial property protection has no practical relevance for ‘sustainability’ in Austria. For example, in May 2022, a search in the national trademark register for the terms ‘Nachhaltigkeit’ or ‘sustainability’ or ‘Green’ yielded more than 200 results, such as:

- ‘Carbon View SUSTAINABILITY SOLUTIONS’,⁶
- ‘CLOUD SUSTAINABILITY’,⁷ or
- ‘GREENROAD’.⁸

These results show quite clearly that the topic of *sustainability* has long since found its way into—at least trademark—law.⁹

³Council Regulation (EU) 2020/852 of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, OJ 2020, L 198, p. 13.

⁴B. Müller, D. Widl, E. Sonnleithner In: Zahradnik, Richter-Schöllner (eds), *Handbuch Nachhaltigkeitsrecht*, Manz 2021, p. 32.

⁵See http://webarchiv.bundestag.de/archive/2008/0506/wissen/analysen/2004/2004_04_06.pdf. Accessed 5 January 2023.

⁶Austrian trademark AT 1179764, protected – inter alia – for *Computer software; computer programs (downloadable software)* in class 9.

⁷Austrian trademark AT 12244703, protected – inter alia – for *material processing; recycling, recirculation, processing, sorting, treatment and disposal of waste* in class 40.

⁸Austrian trademark AT 267537, protected – inter alia – for *engines, other than for land vehicles* in class 7 and *accumulators* in class 9.

⁹The situation is even more pronounced at the European level: as per May 2022, the search term ‘sustainability’ yielded around 300 hits and ‘green’ over 9000.

Apart from these examples, intellectual property law can have both a positive and a negative impact on the issue of sustainability. This can probably be traced back to the fact that the shift to sustainable economic performance requires a transformation of long-established economic systems, and frictions between the old system and the new evolving system are unavoidable. Traditional production processes that no longer meet the specifications of sustainability ('climate neutrality', 'resource conservation', 'circular economy') must be replaced by innovative production methods. All these changes will have an impact on the established system of industrial property rights, which are tailored to traditional manufacturing methods.¹⁰

Consequently, the existing legal framework of intellectual property law will have to be adapted to meet the needs for adequate legal protection for sustainable innovations. In addition, the owners of intellectual property rights will also have to adapt to changed framework conditions to better meet business objectives related to sustainability.

13.2.2 Patent Law

In patent law, the prospect of a patent being granted can naturally be an additional motivating factor to develop environmentally friendly and sustainable solutions. One example of such an invention is the process for the production of green hydrogen by means of electrolysis for the generation of green oxyhydrogen gas, which can be mixed with natural gas resulting in a product with a lower carbon content.¹¹

In the US, the number of patents granted in the field of clean energy (so-called 'green patents') increased dramatically in the first decade of the 21st century and continue to show increasing growth rates. Between 1998 and 2007, an increase of more than 135% was recorded.¹² Furthermore, given the fact that sustainable ideas are very popular, patented inventions that represent climate-friendly or climate-neutral alternatives can generate corresponding licensing income for the patent holder through their commercialisation.

However, in addition to the positive aspects of intellectual property rights, which support the sustainable economic output described above, there are a number of downsides.

¹⁰E. Epplinger, P. Vimalnath, A. Jain, E. Kushnir, A. Gurtoo and F. Tietze: Sustainability Transition in Manufacturing: The Role of New Entrants and how they use IPR. In: Science and innovation – an uneasy relationship? Rethinking the roles and relations of STI policies. In: European Forum for Studies of Policies for Research and Innovation. Oslo: 2021, pp. 1–18e; <https://euspri-forum.eu/eu-spri-annual-conference-oslo-june-9-11-2021/>. Accessed 1 June 2022.

¹¹See www.key-energy.eu. Accessed 21 April 2022. Whether patent protection has actually been granted for this process is beyond the knowledge of the author of this article.

¹²E. Koester, Green Entrepreneur Handbook: The Guide to Building and Growing a Green and Clean Business, CRC Press 2011, pp. 103–114.

A patent can always be blocked for use by third parties by its holder for a certain period of time. Thus, inventions that could help humanity achieve a much-needed more sustainable way of life, in most cases, become difficult to access for the masses. While patent protection is valid, third parties can use inventions only if they enter into often very expensive licence agreements. The only way out of this are compulsory licences, which the owner of a patent is obliged to grant. However, the requirements for this are very strict under both the Austrian Patent Act¹³ and the TRIPS Agreement¹⁴ and often do not represent a realistic alternative. If there are no licence agreements—of whatever kind—third parties can only freely access the protected inventions 20 years after the filing date. In the fight against climate change, every day counts and inventions that will only be made available to the masses decades later are thus blocked or difficult to access for a period of time that is immensely important.

Ultimately, however, it also depends on how holders of intellectual property rights (especially patents) manage them. There are certainly owners who see ‘the greater cause’ behind their invention and are very well aware that their inventions represent important contributions in the fight against climate change and therefore pass on their protected technologies at low licence prices to third parties. At the same time, there will certainly also be entrepreneurs who see the lucrative business behind sustainable inventions and will offer licensing agreements only at very high fees.

13.2.3 Trademark Law

Trademark law and design law (design patent law) already provide valuable contributions to the promotion of sustainable products and economic output. The consumer behaviour of Austrians who tend to opt for environmentally friendly products, for example, reflects the growing trend towards a sustainable lifestyle. The ever-increasing demand for sustainable products can be measured in figures. There are already more than 800 registered ‘organic’ brands in Austria, and based on the trademarks granted according to the Austrian Trademark Register, the number of ‘organic’ brands has increased significantly from 2018/2019. The share of organic food in the retail sector has also more than tripled within two years from 2.7% in 2019 to 11.3% in 2021.¹⁵ Brands and product designs that convey that products were produced in a climate-neutral way or are otherwise good for the environment

¹³Section 36 Austrian Patent Act, Federal Law Gazette No. 137/1971 as amended by Federal Law Gazette I. No. 61/2022.

¹⁴Articles 30 and 31 TRIPS Agreement.

¹⁵Statista Research Department (2022): Organic share of sales of various food products in Austria 2021. See <https://de.statista.com/statistik/daten/studie/427038/umfrage/anteil-ausgewaehlter-bio-lebensmittel-im-lebensmitteleinzelhandel-in-oesterreich/#:~:text=Insgesamt%20hat%20sich%20innerhalb%20von,Euro%20f%C3%BCr%20Bio%2DLebensmittel%20aus.> Accessed 19 November 2020.

immediately catch the eye of buyers and certainly contribute to such products becoming a bestseller.

In this context, quality labels and seals of approval are of particular importance in Austria. They denote products and services that meet specified certification requirements as organic, climate-neutral or climate-friendly or similar and can be protected as guarantee marks. A rough search in May 2022 shows that there are well over 100 organic quality labels in Austria.¹⁶

An example of such a quality label is the Austrian Ecolabel,¹⁷ which is licensed by the Austrian Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology in compliance with strict environmental criteria that can probably also be subsumed under the term ‘sustainability’.

Another example is the AMA Quality Seal¹⁸ that confirms the quality of products (foodstuffs) has been tested. The seal is even protected as a trademark in Austria.

The AMA Quality Seal is the quality mark administered and controlled by Agrarmarkt Austria, a company under public law.

The seal is awarded to foodstuffs that exceed the legal requirements in terms of quality and whose origin can be traced. The guidelines for awarding the AMA Quality Seal must be approved by the Federal Ministry for Sustainability and Tourism. The products’ compliance with the standards is ensured by independent, state-accredited inspection bodies and laboratories. The seal is the best-known quality mark for food in Austria and is recognised by the majority of people living in the country.¹⁹

Even in trademark and design law, sustainable intellectual property rights do not always have only positive effects. Consider, for example, ‘greenwashing’, i.e. cases in which trademarks are registered for goods and services to present them to consumers as sustainable, climate-friendly or the like, or at least as good for the environment, when in reality they are not at all—or at least not to the extent that is made credible to consumers.²⁰ This issue is exacerbated by the fact that the certification criteria for granting licences for certification marks are not always transparent and largely unregulated.²¹ Here, the ground for refusal of registration for deceptive signs according to Sec. 4 para 1 no. 8 of the Austrian Trademark Act and/or the prohibition of misleading advertising (Sec. 2 Austrian Unfair Competition Act) and/or aggressive business practices (Sec. 1a Austrian Unfair Competition Act)

¹⁶ <https://www.bewusstkaufen.at/ratgeber/fleischersatzprodukte/>. Accessed 27 May 2022.

¹⁷ <https://www.umweltzeichen.at/de/home/start>. Accessed 19 November 2022.

¹⁸ [AMA-Gütesiegel: AMA \(amainfo.at\)](https://www.amainfo.at/). Accessed 19 November 2022.

¹⁹ <https://www.amainfo.at/konsumenten/siegel>. Accessed 19 November 2022.

²⁰ More on this topic e.g. Gütezeichen auf dem Prüfstand – Kaufhilfe oder Greenwashing? <https://konsum.greenpeace.at/guetezeichen/>. Accessed 19 November 2022.

²¹ J. Luksan, Zur Intransparenz von Gütesiegeln – Wo Nachhaltigkeit endet und Greenwashing beginnt, NR 2021, pp. 428–435.

could come into play as corrective measures.²² For example, in Austrian case law, the designation ‘made of biological building materials’ for bricks was considered misleading within the meaning of Sec. 2 Austrian Unfair Competition Act, because consumers understand ‘biological’ to mean free of chemicals, but actually a petrochemical product was used in the production of these bricks.²³

Another corrective measure for combatting unfair business practices against inaccurate claims of supposedly environmentally friendly properties in the presentation and advertising of products or services will be the Directive of the European Parliament and of the Council proposed on 30 March 2022. It aims to empower consumers for the green transition through better protection against unfair practices and better information.²⁴ One of the key objectives of this directive is to enable consumers to make informed purchasing decisions and therefore to contribute to more sustainable consumption. It also targets unfair commercial practices that mislead consumers away from sustainable consumption choices.²⁵

13.2.4 Recent M&A Transactions in the Field of Sustainability

In recent years, there has been a noticeable increase in corporate transactions (mergers, acquisitions, investments, as well as the formation of joint ventures) and licensing in Austria the main value-creating factor of which was intellectual property rights. These include, for example, the acquisition of an Austrian biotech company focused on the research and development of vaccines against SARS viruses by an international pharmaceutical company, whereby patented processes for the production of vaccines constituted a significant share of the target company value.²⁶

Another trend in Austria is an increase in transactions or licensing related to goods and services that have the provision of sustainable economic output as their objective or that are otherwise related to sustainable business practices. As examples

²² According to the case law of the German Federal Supreme Court, the award of a quality mark can be prohibited if the associated (over-)examination processes do not show sufficient objectivity; see German Federal Supreme Court 4 July 2019, I ZR 161/18 – IVD-quality seal. See also A. Anderl, A. Ciarnau. In: Zahradnik, Richter-Schöller (eds), *Handbuch Nachhaltigkeitsrecht*, Manz 2021, pp. 75–77.

²³ See Austrian Supreme Court 20 September 1994, 4 Ob 90/94.

²⁴ Proposal for a Directive of the European Parliament and of the Council amending Directives 2005/29/EC and 2021/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and better information of 30 March 2022, COM(2022) 143 final, 2022/0092 (COD).

²⁵ See reasons for and objectives of the Proposal for a Directive of the European Parliament and of the Council amending Directives 2005/29/EC and 2021/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and better information of 30 March 2022, COM(2022) 143 final, 2022/0092 (COD), p. 1.

²⁶ See <https://www.wolftheiss.com/press/press-release/wolf-theiss-advises-msd-on-the-acquisition-of-the-austrian-biotech-company-themis-bioscience/>. Accessed 19 November 2022.

from the recent past, the following transactions can be cited, particularly in the automotive and e-mobility sectors:

- A joint venture with an Austrian company that produces battery systems for mobile applications;²⁷
- Participation in a company that specialises in, among other things, charging point management for e-cars;²⁸
- The acquisition of a company for the rebalancing of rental cars based on data sets for the optimisation of car-sharing models.

However, a more comprehensive analysis of comparable transactions in Austria with a focus on sustainable economic performance is unfortunately not possible due to the lack of availability of the relevant data.

13.3 The Role IP Should Play in Sustainability

13.3.1 Overview

Austria is one of the most modern industrialised nations in the world with a high number of highly-specialised domestic players and a well-developed start-up scene. In this high-tech and innovation-driven environment, intellectual property will play an important role in the development of sustainable solutions. IP should foster innovation by securing the rights of inventors on the one hand and facilitating knowledge sharing on the other. Another important role will be to facilitate investment in local businesses by ensuring IPRs through a strong and clear legal framework and efficient enforcement.

In efforts to overcome climate and environmental challenges and for a more careful use of natural resources, all available possibilities should be used to help mankind achieve a climate-neutral and resource-saving way of life as quickly as possible. For Austria and the EU to achieve the goal of being climate-neutral by 2040 or 2050, as set by the *Green Deal*,²⁹ we need clever minds with inventive skills and the courage to think in new directions. In terms of the ‘reward and incentive theory’, the prospect of or granting of patent protection can undoubtedly be a strong motivation factor for making an effort and accepting the potential financial risk of failure. From this perspective, intellectual property rights, especially patents, can make an important contribution to promoting sustainability.

²⁷ See <https://www.wolftheiss.com/press/press-release/wolf-theiss-advises-miba-on-the-expansion-of-its-eMobility-business/>. Accessed 19 November 2022.

²⁸ <https://www.enio-management.com>. Accessed 19 November 2022.

²⁹ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions – The European Green Deal of 11 December 2019, COM(2019) 640 final, CELEX number 52019DC0640.

The role of intellectual property rights should not be reduced to no longer promoting less sustainable inventions; rather, the focus should be on making the development of climate-friendly ideas more attractive to the masses. A competition between ‘traditional’ inventions and ‘sustainable’ inventions appears to be less than beneficial and one should not exclude the other. The goal should be to ensure that ideas that can possibly contribute to stopping or at least slowing down climate change and which support the careful use of natural resources can be realised as quickly as possible, regardless of the financial means or previous experience of their inventor. Especially for start-ups that carry out research and development in the field of sustainable solutions, an adequate protection of their intellectual efforts is key to the successful marketing of their ideas and services either to investors or for selling licences.

13.3.2 Educational Challenges to Foster Sustainable Innovations

Although Austria has a well-developed legal system for the protection of intellectual property rights and can rely on efficient law enforcement by courts and the Austrian Patent Office, little has been done so far to specifically address the issues of sustainability. In intellectual property legal practice, there are no special provisions or other measures in Austria, either in the legal framework or in the law enforcement practice, that could contribute to the promotion of sustainable economic performance.

The Austrian Patent Office has reviewed over 7000 Austrian start-ups and found that only 6% of them apply for a trademark and only 2% for a patent.³⁰ The number is therefore surprisingly low and shows that Austria still has a lot of catching-up to do to promote awareness among young companies of the essential role that intellectual property rights can play in their success. In addition to the dissemination of appropriate information and educational work, financial support for SMEs lacking considerable expertise in intellectual property rights will play an essential role in facilitating access to the individual IP rights.

Nevertheless, initial efforts to promote sustainability are already evident in industrial property protection. Every two years, the Climate Protection Ministry jointly with the Austrian Patent Office awards the ‘State Prize Patent’ (‘Staatspreis Patent’)³¹ for inventions and trademarks. The awards are intended to honour Austrian inventions and companies that have implemented in practice particularly original, distinctive and complex ideas. Increasingly, patents and trademarks that

³⁰ Austrian Patent Office (2021): Austrian Patent Office takes stock: More inventions despite Corona crisis. <https://www.patentamt.at/alle-news/news-detail/artikel/oesterreichisches-patentamt-zieht-bi/#:~:text=Neue%20Studie%3A%20Das%20Patentamt%20hat,Das%20ist%20schokkierend%20wenig>. Accessed 19 November 2022.

³¹ See <https://www.patentamt.at/staatspreis-patent-2022/>. Accessed 19 November 2022.

represent significant contributions to combating climate change are recognised by this prize.³²

Moreover, the Austrian Patent Office has introduced a number of *educational initiatives*, although they are not specifically geared towards sustainable inventions. It offers free advisory services (in person and online) on basic questions in connection with obtaining patent and trademark protection,³³ organises targeted events and has established the so-called ‘IP Hub’, an online service providing an overview of various topics, including how to obtain IP rights, to interested parties.³⁴ It also allows online searches (partly for a fee) in the patent³⁵ and trademark³⁶ register.

Apart from this, initial educational work could start with broadening the basic understanding of the importance of intellectual property rights and their types among the target audiences, who generally do not have a sound legal education. In counselling practice, it is quite common that companies are not familiar even with the basic distinction between patent law and trademark law and their different protective purposes and requirements for protection.

For example, in trademark law the concepts are often confused. The requirement of distinctiveness of a sign for a company does not necessarily have to be equated with creativity or creative activity (although both characteristics can increase the chances for trademark protection).

More information about the different IP protection systems available for the results of research and development work in Austria and internationally, as well as about the availability of financial resources to inventors and founders, can help companies to become more inventive. Furthermore, advice could be offered to inventors in SMEs and start-ups to support them in developing their ideas. For example, they would benefit from assistance with determining whether third parties already have IP rights for a particular research result, since such searches can be time-consuming and cost-intensive.

13.3.3 Easier IP Application Procedures

Considering the current state of the applicable regulation and the established grant requirements, sustainability still plays a subordinate role in Austrian intellectual property law. The searches for the term *sustainability* on the page of the Austrian Patent Office delivers 20 results, all of which, however, are only indirectly linked to

³²See DER STANDARD (2021): How sustainability can also be beautiful; <https://www.derstandard.at/story/2000131803300/wie-nachhaltigkeit-auch-schoen-sein-kann>. Accessed 19 November 2022.

³³<https://www.patentamt.at/kontakt/>.

³⁴<https://www.patentamt.at/ip-hub/>.

³⁵<https://www.patentamt.at/en/patents/services-searches/searches-and-expert-opinions-section-57a-of-the-austrian-patent-act/markenaehnlichkeitsrecherche/>. Accessed 19 November 2022.

³⁶<https://www.patentamt.at/markenaehnlichkeitsrecherche/>. Accessed 19 November 2022.

the topic of sustainability. Although there are support programmes for companies (such as the ‘Patent.Scheck’ of the Austrian Development Corporation),³⁷ there are no support measures specifically targeting sustainable companies or sustainable economic performance.

Another facilitation measure should be the introduction of *fast-track procedures* for registering sustainable inventions in Austria. EUIPO³⁸ and WIPO³⁹ already have such processes in place. The idea behind this is simple: by speeding up the patent registration, inventions are protected more quickly and rights holders get a clear idea of whether their creations can be protected or not. With these shorter registration procedures, companies can start developing appropriate licensing models and licensing their environmentally friendly inventions more quickly.

Another area in which improvements appear to be necessary to increase the use of industrial property rights for a sustainable economy concerns the *financial support* of SMEs. The goal should be to use benefits and subsidies in a targeted way to make sustainable start-ups and projects even more attractive. For example, financial assistance can be provided for patent protection, which is associated with initial and ongoing costs.⁴⁰ Although Austria already has projects, such as ‘Patent.Scheck’, that provide relief from application fees, these are available to all types of entrepreneurs, regardless of whether they are sustainable or not.⁴¹ Similarly, there are subsidies for young entrepreneurs in Austria, but these can also be claimed by all types of entrepreneurs and thus they do not form an additional source of motivation to make companies more sustainable.

Furthermore, tax relief for sustainability-related inventions should be considered. For example, such relief can be an additional temporary or permanent reduction or even abolition of the taxability of income from licensing,⁴² as well as the elimination of turnover tax for exploitation proceeds.

³⁷FFG (2022): *Patent.Scheck – Subsidies, Conditions*; see <https://www.ffg.at/programm/patentscheck>. Accessed 19 November 2022.

³⁸<https://euipo.europa.eu/ohimportal/de/fast-track-conditions>. Accessed 19 November 2022.

³⁹See https://www.wipo.int/wipo_magazine/en/2013/03/article_0002.html. Accessed 19 November 2022.

⁴⁰The minimum costs of an application in Austria depend on the number of claims; the application fees amount to at least EUR 322, with a fee of EUR 104 being charged for each additional claim from the 11th claim onwards; if the patent is granted, the publication fees of the patent specification amount to at least EUR 208. EUR 208, with an additional fee of EUR 135 for each 15 pages from the 16th page onwards; from the sixth year of registration onwards, the patent proprietor must pay an annual fee; the costs increase from EUR 104 in the first year of payment to EUR 1755 in the twentieth year, Austrian Patent Office <https://www.patentamt.at/>. Accessed 19 November 2022.

⁴¹FFG (2022): *Patent.Scheck – Subsidies, Condition*, <https://www.ffg.at/programm/patentscheck>. Accessed 9 May 2022; see also the funding programme provided by Austria Wirtschaftsservice (AWS) Energie & Klima: AWS: <https://www.aws.at/aws-energie-klima/>. Accessed 19 November 2022.

⁴²Under Section 38 para 1 of the Austrian Income Tax Act, if the income includes income from the exploitation of patent-protected inventions by other persons, the tax rate for the inventor shall be reduced to half of the average tax rate applicable to the total income.

13.3.4 Easier Access to Obtain Patent Protection

Generally, the absolute novelty requirement for inventions creates hurdles for obtaining patent protection for inventions, especially in relation to novel technical challenges and novel technologies which will also include inventions in the field of sustainability. Inventors often either lack experience or rush to make use of their findings, while the publication of inventions prior to filing a patent application makes obtaining the patent impossible. Therefore, it is important to promote the understanding that newly created know-how, which can be the basis for a possible invention, can be protected from the outset by appropriate measures (non-disclosure agreements, no prior publications detrimental to novelty).

At the same time, it would be beneficial to introduce a *statutory grace period* for certain inventions, which would allow the inventor to publicly present or test their invention without jeopardising the protection requirement of novelty to better assess the future success of the invention at an early stage. The narrow exceptions for harmless prior publications currently provided for in Sec. 3 (4) of the Austrian Patent Act and Art. 55 (1) of the EPC would therefore have to be extended or supplemented accordingly. The provisions on the protection of trade secrets under the Know-How Directive (EU) 2016/943⁴³ and Sections 26a–26j of the Austrian Unfair Competition Act⁴⁴ are unlikely to provide sufficient compensation for the need to prematurely publish inventions without putting the (absolute) novelty requirement at risk and endangering the prospects of obtaining patent protection.⁴⁵

Another type of inventions, for which the granting of patent protection should be facilitated, are sustainability-related inventions that fulfil the requirement of novelty and inventive step, but whose *industrial applicability* is not yet clearly recognisable or provable at the time of the patent application. In this respect, the discussion about possible patent protection for sustainable inventions is similar to the discussion in connection with patent protection for inventions in biotechnology and genetic engineering that took place in the 1970s and 1980s. In the early years, when the industrial applicability of research results in these sectors was not yet clear, the patenting of many valuable results did not appear to be secure. It was therefore proposed that so-called ‘*application-related*’ research results could be submitted for patent protection and thus invention protection could be granted for research results even if the applicant could only submit and prove the possibility of their industrial applicability in the course of the patent granting procedure.⁴⁶ This approach deserves to be examined more closely for its application to the area of sustainability.

⁴³Directive 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure, OJ 2016, L 157, p. 1.

⁴⁴Federal Law Gazette No. 448/1984 as amended by Federal Law Gazette I. No. 110/2022.

⁴⁵See on the principle of absolute novelty M. Horkel, W. Poth. In: M. Stadler/, A. Koller (eds), Patent Act, Linde 2019, pp. 61–62.

⁴⁶F.-K. Beier, Zukunftsprobleme des Patentrechts, GRUR 1972, pp. 214–225; F.-K. Beier, J. Straus, Der Schutz wissenschaftlicher Forschungsergebnisse. Zugleich eine Würdigung des

13.3.5 Easier Access to Innovative Processes Through Knowledge Sharing

Another significant factor in fostering sustainable economic performance is knowledge and experience sharing and cross-border cooperation. As the COVID-19 pandemic clearly demonstrated, international cooperation between science and industry was a key driver for the creation of effective vaccines within an extremely short period of time. The discussion on patent exemption for developing countries, triggered by the Corona pandemic and which resulted in a decision by the WTO Ministerial Conference on 17 June 2022⁴⁷ to restrict the rights of patent holders to COVID-19 vaccines for the benefit of countries in need (developing and least-developed countries), could also be pursued in the area of sustainability. The so-called ‘TRIPS waiver’ covers the free access to patent-protected technologies, insofar these are necessary for the development and maintenance of health systems in specified countries. The discussion of this approach will have to be conducted in the same way with regard to the protection for sustainable inventions, especially those related to global climate change.

Easier access to innovative processes and goods will certainly be another important factor, especially if these are innovations that can be classified as *standard essential patents* (‘SEPs’). While under the current legal framework, access to such SEPs is a time-consuming and costly process, the creation of clear legal guidelines could make this process easier and more affordable. One of the focal points of the IP Action Plan of the European Commission⁴⁸ is therefore rightly the creation of such an EU-wide uniform legal framework for licensing of SEPs.

To sum up, no measures facilitating IP sharing, including licensing, or otherwise promoting an increase in cross-company or cross-sectoral cooperation in sustainability-related initiatives exist in Austria. Such measures could comprise financial incentive schemes, but compulsory licensing should be avoided. The solution will continue to be the contractual design of efficient licensing models enabling the commercialisation of new ideas and creative solutions and their use by third parties.

13.3.6 Easier Access Through Digitalisation

Another type of innovation where the promotion of protection will be required is *software* and *algorithms*. Here, first and foremost, copyright protection for software

Genfer Vertrages über die internationale Eintragung wissenschaftlicher Entdeckungen, Verlag Chemie 1982; G. Kresbach, Patentschutz in der Gentechnologie, Springer-Verlag 1994, pp. 88–94.

⁴⁷WTO Draft Ministerial Decision on the TRIPS Agreement of 17 June 2022, WT/MIN(22)/W/15/Rev.2.

⁴⁸See Sect. 13.1 above.

used for the collection and evaluation of data obtained through the use of green technologies should be considered.

It is not wrong to assume that *digitalisation* is expected to contribute a significant share of inventions in the field of sustainability. The increased use of artificial intelligence (AI) and machine learning (ML) should make it possible to achieve commercially applicable results faster and in a more targeted manner. This in turn can lead to a more sparing use of natural resources (energy, water, waste avoidance). To promote the use of AI and ML, it would be helpful to obtain clarity and legal certainty about whether and which outputs produced using AI and ML can be protected by intellectual property rights. It remains to be seen how the legal plans for regulating the use of artificial intelligence will develop at EU level, namely under the proposal for a regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act).⁴⁹

13.3.7 Drafting New IP Laws for Sustainable Innovations?

At the same time, it does not seem very expedient to generally change or loosen the substantive requirements for obtaining protection under intellectual property law (patent: novelty, inventive step and industrial applicability; trademark: distinctiveness) for innovations that have the promotion of sustainability as their objective, or to introduce new intellectual property rights for such inventions at all. Such measures would, first of all, require a consensus on what constitutes a *sustainable invention* and according to which criteria *sustainability* is to be examined.

Even if a consensus is reached, it is obvious that such measures will lead to numerous, not easily solvable delimitation issues. It would also ultimately result in a dilution of property rights, because there would then be at least two different levels of rights. Since in most cases patent protection is not only sought in Austria, but inventors file their inventions centrally with the EPO, the consensus on what constitutes a *sustainable invention*, for which there should be facilitated protection requirements, would have to be reached not only at the national level, but at least at the European level (by the members of the EPC). All this seems to have little prospect of materialising in the near future.

In addition, it is reasonable to expect that the number of applications claiming to be related to sustainable products and services will rise sharply for the sake of getting the registration through quickly. An application under the sustainable inventions category may be made purely to qualify for special treatment with more relaxed requirements for protection. This could then lead to a devaluation of the entire system of protective rights. In trademark law, the situation is not much different

⁴⁹Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts of 21 April 2021, COM(2021) 206 final, 2021/0106 (COD), CELEX number 52021PC0206.

and the protection requirement of distinctiveness of trademarks should not be softened.

Summarising, the IP protection measures strengthening sustainable economic performance should focus less on the creation of new legal provisions under the individual substantive IP laws⁵⁰ or on a new legal framework for the protection of sustainable ideas and inventions. They should rather support companies contributing to sustainable economic performance through financial subsidies, and the deferral or complete waiver of official fees for registration of trademarks, designs and patents.

It is also important to differentiate between large, multinational companies on the one hand and small to medium-sized enterprises (SMEs) on the other. While the former can be assumed to have substantial experience in dealing with new ideas and their implementation in practice, the latter are likely to have very limited experience or none at all. In addition, obtaining and maintaining intellectual property rights can be very expensive (especially if protection is sought not only in Austria, but in several countries or ‘worldwide’) for SMEs and start-ups. They may not have sufficient capital yet to adequately protect their assets such as innovative ideas, concepts and services. Any kind of support should therefore primarily benefit smaller or young companies with little market experience.

13.4 Improving the Success of IP’s Role in Sustainability

As already mentioned in Sect. 13.3.2 above, in the short term, it seems most appropriate to support and promote innovations and ideas related to sustainability through appropriate professional educational and information-sharing measures as well as through financial relief for the registration and maintenance of formal property rights (patents, trademarks and designs).

Adapting existing national IP laws and international treaties (Paris Convention, TRIPS Agreement) is feasible in view of the global dimension of climate change. This step will be necessary, but it seems a long way off and has little prospect of being implemented within a reasonable timeframe.

A much more promising approach to promoting the protection of intellectual innovations and creative ideas is the *IP Action Plan* of the European Commission published on 25 November 2020.⁵¹ In short, in this action plan, the European Commission set themselves the goal to help companies, especially SMEs, to make the most of their inventions and creations and to ensure that the EU economy and society benefit from these. Not least against the backdrop of the Corona crisis, the Action Plan aims at enabling Europe’s creative and innovative sectors to remain

⁵⁰Patent law, Trademark law, Utility Model law, Copyright law.

⁵¹Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Region - Making the most of the EU’s innovative potential. An intellectual property action plan to support the EU’s recovery and resilience of 25 November 2020, COM(2020) 760 final, CELEX number 52020DC0760.

world leaders and to accelerate Europe's environmental and digital transformation. The Action Plan sets out important steps to better protect intellectual property rights, promote the use of intellectual property by SMEs, facilitate the sharing of intellectual property to optimise the dissemination of technologies, fight trademark and product piracy, improve the enforcement of intellectual property rights, and ensure a level playing field worldwide.⁵²

One concrete measure proposed by the EU IP Action Plan in relation to modernising design law has already been acted upon. In April 2021, the European Commission launched a consultation process to adapt the Design Protection Directive⁵³ to the requirements of sustainability and digitalisation, among other things. One of the focal points is the facilitation of design protection for 3D printing technologies, as these technologies are considered to have sustainability advantages over conventional manufacturing processes. The European Commission planned to publish a proposal based on the results of the consultation in the 2nd quarter of 2022. However, neither the consultation results, nor a directive proposal have been published so far.⁵⁴

The application of less strict legal requirements for the protection of sustainable inventions through (national) patents and trademarks seems to be less effective. This would lead to numerous delimitation issues, thereby increasing legal uncertainty and ultimately diluting legal protection.

Whatever measures should be planned at the legislative level or in terms of financial support, it will be important that such initiatives are implemented not only on a national level, but also internationally. A great example of such a cross-border initiative is the 'WIPO GREEN' project. 'WIPO GREEN' is a platform where inventors and buyers of inventions can meet and work together on sustainable ideas.⁵⁵ The portal connecting suppliers and buyers creates a stronger link between entrepreneurs who can support each other in further developing ideas and projects.

13.5 Conclusion

Intellectual property rights play an important role in achieving sustainable economic performance, which to a large extent relies on new and innovative solutions. The importance of such solutions will continue to increase as the challenges ahead multiply. Therefore, the creation of appropriate incentives for research and development to ensure an efficient and easy access to the protection of intellectual property

⁵²https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2187.
19 November 2022.

Accessed

⁵³Directive 98/71/EC of the European Parliament and of the Council of 13 October 1998 on the legal protection of designs, OJ 1998, L 289, p. 28.

⁵⁴For the status of the consultation process see <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12609-Intellectual-property-review-of-EU-rules-on-industrial-design-Design-Directive-en>. Accessed 19 November 2022.

⁵⁵See <https://www3.wipo.int/wipogreen/en/>. Accessed 19 November 2022.

assets will be crucial. This can be achieved through information dissemination and educational measures and the re-shaping of the existing legal framework. Incentives for increased cross-company and cross-sectoral cooperation will also be a decisive factor in boosting the creation of sustainable solutions. The challenges for carrying out sustainable economic activities and the careful use of natural resources, especially against the backdrop of accelerating climate change, are by their very nature not limited to individual countries, but require global efforts. The improvement measures should be taken at least at EU level to create uniform standards across the economic block. Cross-country collaboration in intellectual property law will be essential to accelerate progress and facilitate individual access to sustainable solutions. Purely national measures will not be sufficient.

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