

Utility Models and the European Union

A Fresh Look at the Need for Harmonisation

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20.1 THE SURPRISING LACK OF HARMONISATION

Intellectual property (IP) laws have experienced considerable harmonisation¹ within the European Union (EU) in the last decades. The success story of EU IP law began in the 1980s with Directive 89/104. Today, EU IP law covers trademarks,² designs,³ geographical indications,⁴ copyrights,⁵ plant varieties⁶ and trade secrets.⁷ The EU even managed to achieve a certain degree of harmonisation in the field of patent law with Directive 98/44, and most recently Regulation 1257/2012 that introduced enhanced cooperation for the creation of unitary patent protection. Looking at the IP family, in comparison to its siblings, the utility model (UM) has been EU's "Cinderella" up until now. No directive or regulation deals specifically with UM protection.

The vacuum of EU law in the field of UMs is surprising for at least three reasons: Firstly, UM protection in the EU is nationally fragmented and porous.⁸ Germany

¹ The terms "harmonisation" or "approximation" (see Part Three, Title VII, chapter 3 of the TFEU ("approximation of laws")) can be used in a narrow sense for legal acts aiming directly at the approximating of national laws but also in a wider sense including the creation of unitary IP rights. Cf. Kellerbauer 2019c, para. 2 f. (stating that the introduction of an EU IP right based on Art. 118 TFEU does not aim at the approximation of laws strictly speaking).

² See, e.g., Regulation 2017/1001.

³ See, e.g., Regulation 6/2002.

⁴ See, e.g., Regulation 2023/2411.

⁵ See, e.g., Directive 2001/29.

⁶ See, e.g., Regulation 2100/94.

⁷ See, e.g., Directive Regulation 2016/943. Whether trade secrets are actually IP is unclear in the EU. See Ohly 2021 (arguing for trade secrets to be legal hybrids of unfair competition law and IP).

⁸ Besides the country chapters of this book, an overview of UM protection within the Member States can be found at Radauer et al. 2015, 23 ff. The years of the introduction of UM systems in different countries is also mentioned in Kraßer 1995, 956 ff.

(since 1891),⁹ Poland (since 1919)¹⁰ and Spain (since 1929), for example, have provided UM protection for approximately a century. France introduced its first law on “*certificats d'utilité*” in January 1968.¹¹ Countries such as Hungary (since 1991), Denmark (since 1992),¹² Finland (since 1992),¹³ Czechia (since 1992), Bulgaria (since 1993) and Austria (since 1994) all implemented UM protection in the final decade of the twentieth century. Belgium and the Netherlands had protected inventions for quite some time under a regime of so-called “short-term” patents but have no such system in place today. Other countries like Sweden and Luxembourg have never had a sub-patent protection regime.

Secondly, UM protection clearly varies within the EU Member States that afford protection to UMs.¹⁴ There is no homogenous understanding as to many core features of UM protection, for example the eligible subject matter, the requirements for protection (e.g. novelty or inventive step) or the term of protection.¹⁵ One of the reasons for these divergences is the lack of minimum standards for UM protection within the international framework. Copyright, trademark or patent law, for example, have received a certain degree of international harmonisation, at least via TRIPS, while UMs were only mentioned in the Paris Convention after the Revision Conference of Washington in 1911.¹⁶ The policy space countries enjoy in designing their national UM systems is therefore quite broad.¹⁷

Thirdly, the lack of EU harmonisation is surprising, as UM systems are traditionally intended to offer protection for technological advancements at low costs and thus to address the particular needs of small and medium-sized enterprises (SMEs).¹⁸ The European Commission (EC) has repeatedly emphasised the importance of SMEs for Europe’s economy¹⁹ and the need to boost their use of IP.²⁰ Nevertheless, the EU never implemented a regulation or directive on UM protection.

⁹ See Chapter 6.

¹⁰ See Chapter 8.

¹¹ See Chapter 5.

¹² See Chapter 4.

¹³ See Chapter 9.

¹⁴ This situation is mentioned in many publications: EC 1995, ii; Llewelyn 1997, 8; Gómez Segade 2008, 136.

¹⁵ Cf. the country chapters of this book. For an overview, Radauer et al. 2015, 2019.

¹⁶ See Gómez Segade 2008, 135 f. (mentioning that UMs might not fit in the “dominant US world view of the field of intellectual property”); Cahoy and Oswald 2021, 527 (mention that the scope of protection and rules for acquisition can vary widely among offering countries due to the lack of international harmonisation).

¹⁷ Grosse Ruse-Khan 2012, 7; 2013, 1; Radauer et al. 2015, 7.

¹⁸ EC 1997, 11, para. 28 and the recitals on 30; Boztosun 2010, 430; Radauer et al. 2015, 99; Suthersanen 2019, 11.

¹⁹ EC 2024 (“backbone of Europe’s economy”; “key role in adding value in every sector of the economy”; “central to the EU’s twin transitions to a sustainable and digital economy”; “essential to Europe’s competitiveness”).

²⁰ EC 2020, 11.

This chapter will take a fresh look at the need for harmonisation of UM protection in the EU. It will first look back at EU harmonisation efforts in the past (Section 20.2), before demonstrating the need for EU harmonisation (Section 20.3). It will then describe and question the traditional arguments for UM protection (Section 20.4). Thereafter, the chapter will lay out the EU's policy options and analyse them critically (Section 20.5). It will become clear that there are no perfect solutions to address the need for harmonisation. The chapter will offer thoughts on a new conceptual starting point for further reform efforts (Section 20.6) before concluding (Section 20.7).

20.2 FAILED ATTEMPTS OF THE EC

The EC took serious steps towards unification and harmonisation of UM protection during the flourishing years of EU IP law in the 1990s. The EC authorised a study on the economic impact of UM protection with the German Ifo Institute for Economic Research²¹ in the early 1990s. The Institute undertook a two-step survey in France, Italy, Spain and the UK questioning first patent attorneys and later industrial companies and independent inventors about their use and or desirability for UM protection in the European Community.²² The EC interpreted the results as indicating that manufactures, inventors and patent lawyers advocated a unified system of UMs in the European Community.²³

A potential European reform of UMs in the 1990s also attracted interest from the academic community. Although the director of the influential Max-Planck Institute (MPI), Friederich-Karl Beier, was in 1991 still sceptical about a unified European UM and more in favour of a mere approximation of the respective national laws through a Community Directive,²⁴ his opinion changed. In the first half of the 1990s, the MPI held various workshops and discussions with experts from academia and practice,²⁵ after which it proposed a Community UM and a full draft Regulation in 1994.²⁶

All of these developments led to the EC's Green Paper on the Protection of Utility Models in the Single Market in July 1995.²⁷ The Commission introduced four different options.²⁸ Firstly, a directive approximating all national laws, secondly, a directive requiring the mutual recognition of national rights in other member states, thirdly, a Community UM, and fourthly, a combination of the options. The

²¹ The Ifo Institute for Economic Research is a Munich-based think tank. It is known for its analyses of economic policy and is one of the most influential German research institutions.

²² Weitzel 1994. See also Weitzel 1995.

²³ EC 1995, iv.

²⁴ Beier 1991, 166 f.

²⁵ See, e.g., the report by Kern 1994a.

²⁶ Max Planck Institute 1994.

²⁷ EC 1995.

²⁸ EC 1995, 43 ff.

Commission's Green Paper was in favour of the third option: the creation of a new UM right at the EC level.

However, the creation of a Community UM received very little support.²⁹ Firstly, some Member States did not see sufficient reason to introduce such a system, in particular the powerful UK,³⁰ which did not offer second-tier protection of inventions in its national laws.³¹ Secondly, the language issue remained a barrier. To be a low-budget alternative to patents, the application process needs to be affordable. Therefore, translations in all official EU languages were not feasible for a pan-European UM application. Versions in just one or only a few privileged languages (e.g. English, French and German) would have been cheaper but particularly detrimental to the targeted user community of the system, namely SMEs outside of countries in which these languages were widely spoken.³²

Consequently, the Commission proposed a directive approximating the legal arrangements for the protection of inventions by UMs on 12 December 1997.³³ After the Opinion of the Economic and Social Committee of 27 May 1998 and the Resolution of the European Parliament of 12 March 1999, the Commission presented an amended proposal for a directive on 28 June 1999.³⁴

The work on the adoption of the proposal was suspended in March 2000.³⁵ The Commission prioritised the renewed efforts of a Community Patent Regulation (CPR), which resulted in a proposal in 2000.³⁶ Ultimately, not only did the CPR not materialise, but the Commission also withdrew the amended proposal for a UM directive in September 2005,³⁷ allegedly because it was unlikely to advance further in the legislative process as it could not overcome the opposition from a minority of Member States including the UK.³⁸

In 2013, the EC intended to update its information and analysis on the economic effects of UMs.³⁹ It commissioned a study on the economic impact of UM legislation in selected Member States, the final report from which was published in 2015. The study suggested refraining from making a decision on a unitary UM at the European level for the moment, so as to investigate further possibilities and to

²⁹ See, however, Kraßer 2000, 810 f. (arguing for centralised filing and granting by the EPO which could be offered by the EPO).

³⁰ See, e.g., Llewelyn 1997 (commenting critically from a distinct UK perspective). See also Forrest 2004.

³¹ The UK, however, had a UM system until the beginning of the twentieth century with its Utility Designs Act 1843. See, Chapter 3 and Bently and Sherman 1997.

³² Weinmiller 1996, 150.

³³ EC 1997. See Ravillard 2000.

³⁴ EC 1999.

³⁵ See, Gómez Segade 2008, 137.

³⁶ EC 2000. Critical Gómez Segade 2008, 137 f.

³⁷ EC 2005a.

³⁸ Kardam 2007, 160; Gómez Segade 2008, 138. See also Loth 2001, para. 33 (pointing out that the different opinions on the required level of inventiveness for UM protection were pivotal).

³⁹ Cf. Mercell 2014.

pursue a careful harmonisation process of national UM systems.⁴⁰ Since then, no further action has been taken.

Many things have changed since the main attempts were made to introduce an EU UM law in the 1990s. During these earlier discussions, the UK was one of the leading Member States opposing such measures. Since then, the UK has withdrawn from the EU, and with it one of the major opponents to the EU UM law.⁴¹ Moreover, recent advances in the unification of the patent system have generated momentum for a re-evaluation of EU UM protection. Although the EU has not managed to set up an own patent system yet, the European patent with unitary effect and the Unified Patent Court (UPC) are built on initiatives within the EU and are based to a certain extent⁴² on EU law.

20.3 TWO REASONS FOR THE HARMONISATION OF UM LAW

20.3.1 *The Existing EU IP Framework*

The first reason for EU harmonisation is linked to parts of the EU's secondary law.⁴³ Various legal acts refer to UMs in their scope of application. Given the heterogeneous nature of UM protection within the EU Member States, it is unclear under which conditions a legally protected subject matter is considered a UM and therewith falls in their scope.⁴⁴ For example, Regulation 608/2013 on customs enforcement of IP rights (Customs Regulation, IPCR) defines UMs as an IP right (Art. 2 (1) (k)). The Regulation sets out the conditions and procedures for action by the customs authorities regarding goods suspected of IP infringement. However, the Regulation does not define what a UM is or what conditions qualify a protected subject matter as such. As discussed earlier, the conditions for UM protection clearly varies within the EU Member States that afford protection to UMs.

The situation is similar for Directive 2004/48/EC (Enforcement Directive, IPED). The IPED does not mention UMs explicitly, but it does apply to any infringement of IP rights as provided for by EU law and/or by the national laws of

⁴⁰ Radauer et al. 2015, 6.

⁴¹ See Radauer et al. 2019, 783 (arguing that the chances of a unitary UM system being adopted without the UK participating may be larger than in the past).

⁴² Cf., Regulation 1257/2012 implementing enhanced cooperation in the area of the creation of unitary patent protection.

⁴³ The treaties between the EU member states are known in the EU as primary law. The body of law that is based on the primary law is known as secondary law, and includes, for example, regulations and directives.

⁴⁴ During the drafting of the proposals for UM directives in the 1990s, the Commission realised these uncertainties at least regarding the scope of the targeted directives. Therefore, Art. 1 of the proposals clarified the scope of this intended directive by referring directly to the names of the national rights in the respective national language, e.g. "Gebrauchsmusterrecht" for Austria and Germany and "Certificat de utilité" for France (see EC 1997, Art. 1).

the Member States (Art. 2 IPED) without defining what an IP right or UM is.⁴⁵ It is therefore unclear which kind of national sub-patent rights the Member States must protect with the full spectrum of measures, procedures and remedies enshrined in the IPED. Even an early draft of the EC's proposal for a regulation on standard essential patents included UMs within its scope.⁴⁶ It would have raised a similar uncertainty, though subsequent versions of the proposal removed UMs from its scope.

The lack of a common concept of UM creates not only issues for the application of the EU's secondary law but also for its interpretation. The aforementioned Customs Regulation and Enforcement Directive set certain standards for the enforcement of IP law. In the last decades, awareness has been growing that a one-size-fits-all approach is detrimental to an efficient IP framework. A more holistic approach is required taking into account the nature of the IP right, the context of the infringement and the proportionality of a remedy.⁴⁷ If the ECJ were to decide on the requirements to issue a preliminary injunction based on a UM under Art. 9(1)(a) of the IPED, it would be impossible to strike the right balance without having a common understanding of the protected subject matter the law intends to enforce. A holistic approach would need to differentiate based on the conditions for UM protection in the Member States. This distinction is crucial because the right balance significantly varies whether the subject matter is a trivial advancement, possibly even obvious to a person skilled in the art,⁴⁸ or if the national UM is essentially a full-fledged patent with just a shorter duration and no prior substantive examination before the grant.⁴⁹ One might argue that patentability requirements are neither harmonised by the EU, so these uncertainties are not specific to the UM rights but to the protection of inventions on a more general level within the EU. A significant distinction to patents is, however, that the conditions for patent protection are harmonised either through or as a consequence of the Strasbourg

⁴⁵ See also EC 2005b (mentioning utility models as one IP right covered by the scope of the Directive).

⁴⁶ EC 2023a, Art. 2(3) ("patent" means patent or utility model"). See, however, EC 2023b, Art. 2 (does not mention UMs; definitions refer only to patents). See also Chapter 16, discussing standards-essential UMs.

⁴⁷ A prominent example is the discussion about proportionality and patent injunctions. In Germany, the quasi-automatic approach to permanent patent injunctions (see Stierle 2019 ("quasi-automatische Unterlassungsanspruch")) was changed by an amendment in 2021 introducing a proportionality defence. The amendment takes into account the effects of a potential injunction. For an overview of the new law see Stierle and Hofmann 2022 (referring in particular to third-party effects); Picht and Contreras 2023, 435 ff. (assessing the effects of the new defence in SEP cases).

⁴⁸ Poland, e.g., does not require any degree of inventiveness for UM protection. See Chapter 8 or Bury 2022, 40.

⁴⁹ See, e.g., Germany where the requirement of inventive step is interpreted similarly to the non-obviousness requirement in patent law, according to *Demonstrationsschrank*, FCJ 2006. Cf. Chapter 6.

and the Munich conventions.⁵⁰ Moreover, a general framework can be found in Article 27 ff. of the TRIPS Agreement that brings the national patent systems within the EU closer together than the UM systems.

One might think that an ECJ interpretation of the term “UM” or “IP” after a referral by a national court could have at least a similar effect. With its preliminary ruling in “Cofemel”, for example, the Court set the requirements for copyright-protectable work due to the absence of a definition in the various legal acts of the EU.⁵¹ However, the situation in copyright law is hardly comparable to UM law as various legal acts by the EU design a copyright framework with exploitation rights, limitations and exceptions, etc.⁵² These legal acts as well as the respective decisions⁵³ give at least a certain guidance on a general understanding of copyright law as well as some key features of the copyright framework which hints towards an EU concept of “work”. There is no secondary law of the EU addressing UM protection. Moreover, UMs are registration rights where legal clarity provided by a Directive or Regulation is more important than in the field of unregistered rights such as copyrights.⁵⁴

20.3.2 The Single Market

The second reason for the introduction of an EU UM law refers to the concept of the EU single market and is based on the EU’s primary law. The discussions which took place in the 1990s and the proposals of the EC have already featured these aspects.⁵⁵ The recitals of the two proposed directives outline the porous nature of the protection of UMs across the EU and the differences in the existing UM protection systems, which have the potential to obstruct the free movement of goods and distort competition within the internal market. The explanatory memorandum mentioned explicitly Art. 2,⁵⁶ Art. 3(c),⁵⁷ Art. 3(g)⁵⁸ and Art. 7a⁵⁹ of the old EC Treaty in this regard. According to the Commission, the fragmentation of protection forces right holders to avoid markets in which they cannot obtain an equivalent protection for their invention.⁶⁰ Moreover, the significant variations between national systems

⁵⁰ Cf. Max Planck Institute 1987, 314 (mentioning this difference regarding the obstruction of the free movement of goods).

⁵¹ *Cofemel*, CJEU 2019, para. 26 ff.

⁵² See, e.g., Directive 2001/29/EC.

⁵³ Cf. the references to prior decisions in *Cofemel*, CJEU 2019, para. 26 ff.

⁵⁴ Art 5 (1) of the Berne Convention.

⁵⁵ EC 1997, 30 f. and EC 1999, Recital 3 and 15 (“transparent, obstacle-free single market; “in order to safeguard the proper functioning of the single market and ensure that competition is not distorted”).

⁵⁶ *Ibid.*, 8, para. 19.

⁵⁷ *Ibid.*, 6, para. 14.

⁵⁸ *Ibid.*, 8, para. 19.

⁵⁹ *Ibid.*, 6, para. 14.

⁶⁰ *Ibid.*, 7, para. 16.

make it even more difficult to obtain cross-border protection as an invention which qualifies for protection in one Member State may not qualify, at least not on the same terms, in another, according to the EC.⁶¹ These aspects trigger a need for legal expert advice creating administrative difficulties and a major cost factor. The Commission pointed out that such a situation restricts innovative activity and distorts competition.⁶² In 2008, Gómez Segade advanced that these risks are even stronger today than they were in the 1990s due to the subsequent EU enlargement increasing the degree of fragmentation and heterogeneity.⁶³

In its reasoning more than 25 years ago, the Commission focused largely on the interests of potential right holders – an approach that stems from the IP zeitgeist of that period. However, not all the points the EC advanced are entirely convincing. There are doubts as to whether businesses would avoid the EU or specific Member States for the sole reason that their inventions would not be eligible for UM protection in these jurisdictions. Third parties can copy and sell their products in these countries regardless of whether the originator is present. Offering goods also in these national markets can be attractive for the originator if he can recoup his R&D costs through his business in a Member State that protects his technology as a UM anyways. A recent study even suggests that marginal disharmony in the field of UMs works reasonably well for those right holders who can effectively navigate such environments.⁶⁴ They are able to optimise the differential appropriability of these rights to achieve protection efficiencies and accommodate national differences, according to Cahoy and Oswald.⁶⁵

A modern analysis of the effects of the status quo needs to integrate the perspective of the right holders' competitors. Today, this appears to be the major reason for UM harmonisation from a "single market perspective". The lack of harmonisation and therewith the lack of transparency creates disincentives to commercialise products also on the side of enterprises who do not hold any rights, or which hold rights in another Member State. A firm willing to offer goods within the internal market is at risk of running into UM infringement in one part of the single market while selling products legally in another part. This risk, along with the lack of transparency, currently poses the most significant potential threat to hinder the free movement of goods and to distort competition as companies might refrain from offering their goods and services in Member States where they are not entirely aware of the peculiarities of the national law on UMs.

⁶¹ *Ibid.*, 6, para. 16 f.

⁶² *Ibid.*, 7, para. 18.

⁶³ Gómez Segade 2008, 138 (referring to the EU enlargement in 2004 and pointing out that the new Member States Romania and Bulgaria have UM protection systems; since then, also Croatia joined the EU).

⁶⁴ Cahoy and Oswald 2021, 573 ff. and Chapter 18.

⁶⁵ Cahoy and Oswald 2021, 574 and Chapter 18.

20.4 GENERAL REASONS FOR UM PROTECTION

We have seen now that the existing EU's secondary law on IP as well as the concept of the single market call for a harmonisation of UM protection on an EU level. Before looking into the EU's policy options, we want to get a clearer picture of the general reasons for UM protection as these aspects will have an impact on the analysis of the policy options for harmonisation.

Traditionally, governments, institutional actors, practice and scholarship indicate three main reasons to establish or maintain a UM system. Notably, all three refer somehow to the patent system ("cheaper", "faster" and "lower"), which makes them "relative grounds" for UM protection. Therefore, the justification for UM systems is also a "relative justification" as it bears a strong tie to its "big brother" – the patent system. It will become clear that the main task of a UM system is to perform a gap-filling function, which intends to overcome certain shortcomings of this brother system.⁶⁶ It will also become apparent that the traditional arguments for UM protection are to a certain extent ambiguous and the justification of UM protection is therefore rather weak.

20.4.1 *Cheaper*

UM systems are intended to lower the cost barriers for the IP protection of technical inventions,⁶⁷ and come in the form of "registration rights".⁶⁸ UMs do not have to pass a full-blown substantive examination before protection is granted.⁶⁹ This is different than the majority of patent systems in the EU and the European Patent Convention (EPC) where an office investigates substantive patentability requirements before registering the right. Hence, IP offices can offer UM protection for less than patent protection. As mentioned in the beginning, UM protection is therefore supposed to be particularly attractive for SMEs which have a relatively small budget for IP protection in comparison to larger enterprises.⁷⁰

The potential savings for an SME to obtain UM protection instead of patent protection might be less than expected. The office fees for UM protection are indeed lower than the fees for patent protection in many countries. However, some SMEs, in particular micro entities, can achieve patent protection with discounts in

⁶⁶ See, e.g., Bently and Sherman 1997, 277; Reichman 1998, 48-2; Boztosun 2010, 431. Heikkilä and Verba 2018 claim that data on UM needs to be taken into account when analysing patent families. The same is true for a thorough investigation of the patent system as such which also requires to factor in the effects of an accompanying UM system.

⁶⁷ For the cost barrier to obtaining patents, see Holgersson 2013.

⁶⁸ Radauer et al. 2019, 777. But see Cummings 2010, 301 (stating that some countries have implemented systems of substantive examination similar to standard patent systems).

⁶⁹ Gómez Segade 2008, 135.

⁷⁰ EC 1995, 15.

various jurisdictions.⁷¹ Furthermore, the overall costs for UM protection are primarily driven by patent attorney fees for drafting claims and specifications, which are comparable to those within the patent system.⁷² Finally, it is more likely that the UM will be challenged than a patent for the same invention during its lifetime as the office does not perform a full-blown substantive examination of UM applications. Therefore, the enforcement costs of UMs can be even higher than the enforcement costs within a patent system.⁷³ Taking this into account, UMs may not provide SMEs access to effective IP protection that is substantially cheaper.

20.4.2 *Faster*

As there is no requirement for a substantive examination, a UM system offers protection faster than a patent system.⁷⁴ Patents are generally granted years after the application, whereas UMs will be registered within months or even weeks. In Germany, one of the countries prominent for its UM system,⁷⁵ the registration procedure to obtain UM protection is completed after 4.2 months on average while the patent granting procedure takes usually 2.5–3 years.⁷⁶

Given the speed of registration, UMs are sometimes used as measures to protect an invention that is subject to a patent application while the application is still pending. A patent application does not provide a right to an injunction in many jurisdictions⁷⁷ while a UM does.⁷⁸ Therefore, companies may “branch-off” UMs from prior patent applications as permitted in some Member States. An applicant is allowed to claim the filing and, if applicable, priority date of a previously submitted patent application for a subsequent UM application provided the latter application concerns the same invention.⁷⁹

However, fast IP protection is in numerous cases not very attractive. UMs are published upon registration as a quid pro quo for protection. Therewith, the invention leaves the sphere of secrecy more rapidly than it would under the 18-month

⁷¹ See, e.g., the new fee system for European patent applications effective from 1 April 2024.

⁷² Janis 1999, 180; Radauer et al. 2019, 782 f. See also Takenaka 2021a, 622 (arguing that official fees are low, but costs for preparing claims and specifications high for individual inventors).

⁷³ Cf. Janis 1999, 182 (arguing that the costs and complexity of IP enforcement are the most significant obstacles to SMEs’ access to the patent system).

⁷⁴ Some IP offices proactively advertise national UM protection as fast protection. See, e.g., DPMA 2020 (“Utility models are ‘fast IP rights’”).

⁷⁵ Cf. Bently and Sherman 1997, 266 (mentioning that the German UM system is widely regarded as the prototype for second tier protection); Kardam 2007, 156 (calling it the mother of all UM laws).

⁷⁶ See Chapter 6. See also Heikkilä and Lorenz 2018, 3.2.

⁷⁷ See, e.g., Austria, Denmark or Germany.

⁷⁸ See Art. 9 (1) (a) Directive 2004/48/EC applicable to all IP rights.

⁷⁹ See, e.g., Chapters 4 (Denmark) and 6 (Germany). See also Radauer 2015, 32 ff. (for Germany), 51 (for Austria), 62 (for Denmark), 90 (for Czech Republic), for 110 (Finland). Branching-off is not possible in France, though (Radauer 2015, 120).

publication delay for patent applications. Thereafter, competitors can use the information as a springboard for subsequent developments, which might not make UM protection very attractive for applicants. We can observe similar reluctance to opt for fast protection with patents. Patent applicants requiring faster search or examination can ask the European Patent Office (EPO) to have their applications processed under the programme for accelerated prosecution of European patent applications (PACE).⁸⁰ However, data indicate that very few applicants are interested in such fast-track proceedings,⁸¹ allegedly due to the secrecy inherent in a slower examination.⁸²

Even if access to speedy IP protection is necessary while a patent application is prosecuted, patent internal measures might be just as feasible as a separate UM registration and allow for a more coherent policy approach.⁸³ Art. 67 (2) of the EPC, for example, requires the Contracting States to ensure at least that the applicant can claim compensation reasonable in the circumstances from any person who has used the invention after the date of publication of the application. However, the Contracting States are free in granting earlier or stronger protection,⁸⁴ for example enshrining a UM-style right to an injunction in their national laws.⁸⁵

20.4.3 Lower

Traditionally, UM systems offer protection for incremental innovation while the patent system is supposed to protect more substantial improvements over the state of the art. In many jurisdictions, the requirements for UM protection are lower than the prerequisites for patent protection, in particular the level of required

⁸⁰ See EPO 2015a; EPO 2015b.

⁸¹ See also Hilty and Batista 2023, 829.

⁸² There are also other strategic considerations of applications that weigh against the use of a fast-track, e.g. the lifetime of a pending application becomes shorter and therefore the time to file divisional applications is reduced or the fact that a long patent prosecution is beneficial for the applicant who has not yet actually reduced the invention to practice.

⁸³ Cf. Königler 2017 (pointing out that the advantages for the inventor could be reached by small changes to patent law if wanted).

⁸⁴ Cf. Art. 67 (2) EPC (enshrining that a Contracting State may prescribe that a European patent application shall not confer the same protection as a granted patent but not that it cannot).

⁸⁵ For the situation in the Contracting States, see, e.g., Art. 132 (1) of the Italian Code of Industrial Property allowing for precautionary protection if the application has been made available to the public or with respect to the persons to whom the notification of the application was given. For the UK, see [2022] EWHC 959 (Ch), para. 16 ff. according to which the High Court has jurisdiction prior to grant of the patent to issue an interim injunction, although it did not grant such relief in the specific case (damages were considered to be an adequate remedy if the claimant were to ultimately prevail). However, the majority of Contracting States do not offer the possibility to issue preliminary injunctions based on patent applications. For an overview, see EPO 2023, 99 ff. For Germany, as one example, see Sec. 1 (1) (3) of the German Law on International Patent Treaties and *RRMS-Therapie*, RCD, 2022. See also Bouvier-Ravon and Hoppe 2024, 7 for the situation under the UPCA.

inventiveness.⁸⁶ At the same time, UM protection is weaker and shorter⁸⁷ than patent protection as the idea is to provide a moderate IP right for the corresponding level of innovation.

However, it is often unclear precisely how to distinguish between low and high standards of inventiveness. In its groundbreaking decision “*Demonstrationsschrank*”, the German Federal Court of Justice pointed out that this is hardly possible in practice.⁸⁸ Moreover, granting UM protection below the non-obviousness standard of patent law offers IP protection for subject matter that is theoretically obvious to the person skilled in the art. This result amounts to a break in the general understanding of IP law and cannot be justified against the background of the constitutionally protected freedom of action of third parties, according to the German Federal Court of Justice.⁸⁹ The Court therefore held that the required threshold for inventiveness in UM law can only be the same as in patent law. Other countries followed suit.⁹⁰ These judicial concerns cast doubt on the viability of the lower standard of inventiveness in UM law from a legal perspective.

From public policy perspective, it is debatable whether monopoly rights should be granted for trivial achievements, particularly in times of IP thickets. The German Federal Court of Justice addressed this point from a purely legal perspective when referring to the third-party freedoms protected by fundamental rights. But one can also raise this argument from an economic perspective, as it has been done in the scholarship on UM protection.⁹¹ Enterprises already have problems to identify the relevant patent rights during a freedom-to-operate (FTO) analysis when they seek to avoid IP infringement and hold-up. The efforts of firms must be substantially stronger when grain-sized innovation receives protection since trivial achievements are harder to trace. Moreover, in the case of UMs, the rights were not examined by the patent offices. Hence, the competitors are forced to investigate the validity of the claims.⁹² This is particularly problematic for SMEs, the alleged core user of the UM

⁸⁶ See, e.g., Chapter 4 (noting that Danish patent law requires that inventions differ essentially from the state of the art while UM law requires only that inventions differ distinctly) or Chapter 8 (describing that Polish UM law has no requirement of inventiveness).

⁸⁷ See the examples in Suthersanen 2019, 5.

⁸⁸ *Demonstrationsschrank*, FCJ 2006, para. 19. See also Hüttermann and Storz 2006, 3180 (pointing out that it was unclear before the decision as to how the different standard for UM protection would even make a difference in practice) and Chapter 4 (pointing out that it can be difficult to measure the exact content of the required degree of inventiveness in Danish UM law (differ distinctly from the state of the art) in comparison to Danish patent law (differ essentially)).

⁸⁹ *Demonstrationsschrank*, FCJ 2006, para. 20 (“*Systembruch*”). See also Meier-Beck 2007, 915 (arguing that this cannot be the legislator’s intention).

⁹⁰ See, e.g., *Teleskopausleger* (Austria). For a discussion of the case, see Adocker 2011.

⁹¹ See, e.g., the application of the theory of anticommons property to UM protection by Janis 1999, 200 ff. or the discussion of his prominent “green tulip” problem by Reichman 2000, 1756 ff.

⁹² Königer 2017, 75.

system. Many authors have therefore unmasked the notion of UMs as small patents for small inventors as a myth.⁹³ There is a particular concern that large firms flood a promising area of technology with an array of UMs,⁹⁴ particularly since major international enterprises appear to be the core users of many national UM systems.⁹⁵

The overall economic impact of sub-patent protection within the EU appears therefore unclear and potentially negligible. Economic scholarship has found that UMs favour growth in developing countries when the capacity to conduct innovation research does not exist.⁹⁶ A minor innovation can be a learning device and thus a stepping stone for developing patentable inventions later.⁹⁷ UMs are considered particularly useful in times of “catching up”⁹⁸ but there is no conclusive evidence regarding their positive impact in developed and highly developed countries or economic unions. As discussed at length in Chapter 10, the impact of UMs in a highly developed country has been studied deeply and at different points in time in Australia where a UM-like system was established in 2001. However, after a short span of protection lasting about 20 years, the Australian government began the process of phasing the system out as it did not achieve its intended objectives. It is therefore very unclear whether there is a need to incentivise incremental innovation with the prospect of an inclusive right such as a UM.

20.5 THE POLICY OPTIONS

If the EU wants to become more proactive in the field of UM, there are multiple policy options to consider. The following gives an overview of the legally binding options based on regulations and directives. The overview leaves out the possibilities of enhanced cooperation (Art. 20 TEU)⁹⁹ and common European approaches beyond EU law.¹⁰⁰ A sound policy option needs to accomplish a difficult task: On the one hand, it must address the two major reasons that require an EU harmonisation of UM protection (see Section 20.3). On the other hand, it has to take into account that the justification for UM protection in general is rather weak (see Section 20.4).

⁹³ Janis 1999, 179, 186; Forrest 2004, 216; Königler 2017, 75. Terminology after Radeauer et al. 2019.

⁹⁴ Janis 1999, 187; Forrest 2004, 220.

⁹⁵ See Chapter 2.

⁹⁶ Kim et al. 2012, 358; Radauer et al. 2015, 20. See also, Chapter 22, describing UMs as “development tools” and Suthersanen 2006 for an assessment of UM protection in developing countries.

⁹⁷ Kim et al. 2012, 358; Radauer et al. 2015, 20.

⁹⁸ Kardam 2007, 173. See also Prud’homme 2017a (demonstrating that there is also a tendency within UM systems to apply lower standards in times an economy is “catching up” and higher, more patent-style standards once the economy is more developed).

⁹⁹ See, e.g., Regulation 1257/2012 implementing enhanced cooperation in the area of the creation of unitary patent protection.

¹⁰⁰ See, e.g., the European Patent Organisation and the EPC.

20.5.1 *The Instruments*

In general, the EU has several different options for becoming more proactive in the field of EU IP law. The binding legal acts available to unify UM protection or to approximate the respective national laws are regulations and directives.¹⁰¹ A regulation is binding in its entirety and directly applicable in all Member States (Art. 288(2) of the Treaty on the Functioning of the European Union (TFEU)). A directive is binding as well but only as to the result to be achieved. Hence, national authorities have the discretion to choose the form and methods (Art. 288 (3) TFEU) and, as a general rule,¹⁰² direct effect does not apply. In sum, it is for the Member States to adjust their laws and to give effect to the directive.

We must distinguish between maximum or full harmonisation on one hand and minimum harmonisation on the other when referring to the level of approximation the EU intends to achieve with a directive.¹⁰³ A directive can regulate a particular area exhaustively and preclude Member States from deviating from defined standards (maximum or full harmonisation). In the case of minimum harmonisation, the EU sets minimum standards and allows Member States to maintain or provide for more stringent national laws.

20.5.2 *The Competences*

The EU has no competences by right as they are all voluntarily conferred on it by its Member States (principle of conferral, Art. 5(1) of the Treaty on European Union (TEU)). It can only act within these competences defined by the Member States in the Treaties (Art. 5(2) TEU). Competences not conferred upon the EU in the Treaties remain with the Member States (Art. 4 (1), 5 (2) TEU).

We need to distinguish between the competencies to establish an EU IP right and the competencies to harmonise national laws on IP. Art. 118 TFEU empowers the EU to introduce an EU UM system,¹⁰⁴ and allows measures to be established for the creation of European IP rights to provide uniform protection throughout the EU and for the setting up of centralised EU-wide authorisation, coordination and supervision arrangements.¹⁰⁵ Art. 118 TFEU does not constitute “competition rules”

¹⁰¹ For an overview of the legal acts of the EU, see Art. 288 TFEU.

¹⁰² In special cases, Directives can have a direct effect if they are unconditional and sufficiently precise and the Member State has failed to implement it in domestic law by the end of the period prescribed or where the Member State failed to implement it correctly. See *Dominguez*, ECJ, 2012, para. 33 with further references.

¹⁰³ For an overview, see Kellerbauer 2019a, para. 4.

¹⁰⁴ Kellerbauer 2019b, para. 7; Wichard 2022, para. 3.

¹⁰⁵ For example, the reform of the Community trademark was based on Art. 118 TFEU. See Regulation 2015/2424. As a general rule, Art. 114 TFEU is not a suitable legal basis in such cases where a co-existing legal regime of EU law that supplements national law without harmonising

for the purpose of Art. 3(1)(b) TFEU but it does fall within the “internal market” area in which the EU has shared competences under Art. 4(2)(a) TFEU.¹⁰⁶ Accordingly, pursuant to Art. 5(3) TEU, the principle of subsidiarity applies where EU legislature makes use of Art. 118 TFEU.¹⁰⁷ In practice, however, the importance of this principle is limited since it will be difficult for Member States to achieve the creation of IP rights, including an EU UM right, which benefits from EU-wide protection without EU intervention.¹⁰⁸ Hence, Art. 118 TFEU would serve as a basis to create an EU UM system by a Regulation.

An EU directive which does not establish uniform IP protection by the EU but merely intends to approximate national IP laws cannot be based on Art. 118 TFEU.¹⁰⁹ However, Art. 114 TFEU does provide a general competence for harmonisation measures “which have as their object the establishment and functioning of the internal market”. To limit the danger of an unduly wide interpretation that would lead to an open-ended form of EU power, the European Court of Justice (ECJ) requires for the substantive conditions to be fulfilled that the measures have the genuine objective of improving the conditions for the establishment and functioning of an internal market. They should address disparities between the legal systems of the Member States that significantly obstruct fundamental freedoms and thus have a direct effect on the functioning of the internal market.¹¹⁰ The current situation has the potential to obstruct the free movement of goods and distort competition within the internal market, as discussed above. This gives the EU the competence to harmonise national UM regimes based on Art. 114 TFEU. The principle of subsidiarity also applies¹¹¹ in the framework of Art. 114 TFEU but its importance is again limited in practice. If the substantive condition in the interpretation of ECJ is fulfilled, Member States will regularly struggle to prevent any negative impact on the international market without the action of the EU.¹¹²

or replacing it is introduced. See, both with further references: Kellerbauer 2019a, para. 28; Korte 2022, para. 24.

¹⁰⁶ *Kingdom of Spain and Italian Republic v Council*, ECJ, 2013, para. 16; *Kingdom of Spain v EP and Council*, ECJ, 2015, para. 40; Kellerbauer 2019b, para. 2.

¹⁰⁷ Kellerbauer 2019b, para. 10.

¹⁰⁸ Kellerbauer 2019b; Stieper 2022, para. 28; Wichard 2022, para. 12.

¹⁰⁹ Khan 2015, para. 6; Bings 2018, para. 3; Stieper 2022, para. 21; Wichard 2022, para. 3.

¹¹⁰ *The Queen, on the application of Vodafone Ltd and Others v Secretary of State for Business, Enterprise and Regulatory Reform*, ECJ, 2010, para. 32; *Philip Morris Brands SARL and Others v Secretary of State for Health*, ECJ, 2016, para. 58.

¹¹¹ See *The Queen, on the application of Alliance for Natural Health and Nutri-Link Ltd v Secretary of State for Health and The Queen, on the application of National Association of Health Stores and Health Food Manufacturers Ltd v Secretary of State for Health and National Assembly for Wales*, ECJ, 2005, para. 103; Kellerbauer 2019a, para. 37, 40.

¹¹² Kellerbauer 2019a, para. 40.

20.5.3 *UM Regulation*

20.5.3.1 Policy Option 1: EU UM Right

The first policy option is to adopt a regulation based on Art. 118 TFEU and to introduce an EU UM right providing for unified protection similar to the Community/EU trademark or the Community design. As mentioned in Section 20.2, this was the policy option the EC originally favoured in its green paper 1995. The registration would be administered by the European Union Intellectual Property Office (EUIPO). The EUIPO's lack of expertise in assessing technical subject matter would be insignificant. UMs are registration rights, so the EUIPO's task would be to perform a formality check prior to registration while EU UM courts could assess the substantive requirements for protection during infringement proceedings. The unification of UMs would ensure protection in all Member States of the EU but, at the same time, an objection against this EU right in any Member State could defeat or invalidate the right in its entirety. The regulation would provide a full-fledged and autonomous system including provisions on protected subject matter, infringement and enforcement. This new regime would not touch the national UM systems which could continue to exist in parallel if desired.

An EU right would solve the problem for inventors of the fragmented and porous nature of UM protection within the EU. Nonetheless, the fragmented protection provided by national UMs and the divergent national laws would persist, leading third-party businesses to encounter substantial expenses when conducting an FTO for the single market in order to mitigate the risk of infringing a parallel national right in one of the Member States. It is unclear whether such an EU system would lead at least *de facto* to a certain harmonisation of national systems in the long run.

Users seeking EU-wide protection will save costs with a pan-European right. Nevertheless, the costs for the EU and users to establish such a system, to maintain it and to make use of it cannot be underestimated. For example, the language issue mentioned above, which was a determining factor in the discussions of the 1990s, has still not entirely been solved. Today's translation software dramatically reduces the administrative costs in comparison to the situation 30 years ago, but the EU has increased significantly in size (i.e. the number of Member States, and thus languages) since then. Also, overall administrative costs would increase to the extent that Member States retain their national UM systems and administration while the EU must invest in setting up and running a pan-European administrative structure.

In general, having an IP system that spans multiple countries and languages could not be anything but expensive. Thus, whether such a structure can provide an IP right for SMEs at low costs is doubtful. If such protection is indeed desired, it appears rather obvious that it should be offered "in the basement" via national UM

rights with low administration costs while the more expensive European “*bel étage*” is reserved for substantial innovation examined by an office and protected by patents.¹¹³

The other two substantial arguments against an EU UM are linked to the general justification of UM protection. First, as outlined above, the arguments and justifications for a UM protection system in a highly developed economic union lack strength. There is no conclusive evidence that a pan-European UM system would have a positive impact on the EU’s public welfare. It would be an experiment. One might argue that a regulation would be the right way to carry out such an experiment. In a more general context, Martin Husovec has advanced that if the EU legislator intends to experiment with new IP rights, it should use regulations instead of directives.¹¹⁴ He made the point that if the EU has to repeal such an instrument once it has failed to deliver on its promises, it automatically ceases to exist also on the national level.¹¹⁵ The EU legislator is not required to clean up and coordinate a removal in the national laws.¹¹⁶ Although IP policy is less dynamic in reality than in theory,¹¹⁷ Husovec’s point appears correct in the field of copyright law where rights come into existence without registration.¹¹⁸ However, setting up a new EU registration system, hiring staff for an EU office, and teaching users on a pan-European level how to make use of new structures is far more costly and time consuming than a national experiment, making it also rather unlikely, not only for political reasons, that the EU would eventually repeal such a right. Hence, without a strong justification for UM protection, the EU should refrain from introducing an EU UM system – even if intended as a mere experiment.

The second substantial argument against an EU UM system arises from the framework of the system. Even if one sees the need for EU UM protection, it is unclear how one should design it. As noted above, UM systems are supposed to perform a gap-filling function. However, national patent laws are not harmonised, so the gaps to be filled are of different sizes and are based in different locations depending on the Member State. It is impossible to suggest a one-size-fits-all auxiliary tool in this constellation where the main system is multifaceted.¹¹⁹

¹¹³ See, for this distinction within a two-track system, Beier 1991, 166.

¹¹⁴ Husovec 2020, 2.

¹¹⁵ Husovec 2020.

¹¹⁶ Husovec 2020.

¹¹⁷ See also Husovec 2020 (mentioning that the legislator almost never goes back to question its old choices).

¹¹⁸ *Ibid.*, 1 used examples from the copyright sphere, e.g. high publishers’ rights, data producers’ rights, sport events organisers’ rights, databank protection.

¹¹⁹ Gómez Segade 2008, 136.

20.5.4 *UM Directive*

The other policy options would address national laws with a directive and would be based on Art. 114 TFEU. The directive could be combined with the first option (EU UM right) described above, similar to the situation in EU trademark or design law. Also, the following options could be combined.

20.5.4.1 Policy Option 2: Negative Full Harmonisation

There are two types of full harmonisation here. The first is negative full harmonisation, whereby EU law approximates national laws by pre-empting the field of UM protection.¹²⁰ Member States with a UM protection system would be required to abolish it as negative full harmonisation leaves no leeway for the national systems. This would create full transparency within the internal market, in particular for businesses that intend to operate across all geographical areas but are currently afraid of overlooking a national UM right in one Member State. Negative full harmonisation would also eliminate all costs related to the establishment, maintenance and usage of the UM system.

Pre-empting national IP rights means interfering with Art. 17(2) of the EU Charter of Fundamental Rights (CFR).¹²¹ Nevertheless, this interference is easily in line with the Charter if it does not concern inventions that already exist as Art. 17 does not embrace any kind of institutional guarantee for IP rights which the legislator cannot touch.¹²² Even if a “core property” were to exist that places certain forms of property outside of the legislator’s reach, it appears to be obvious that UM rights which have never been protected in some Member States would be considered to fall outside this scope.

Although Art. 17 CFR does not prohibit negative harmonisation, the legal and political threshold for such a measure is very high. According to the literature, negative harmonisation of IP rights is not necessary to overcome issues concerning the single market.¹²³ The European legislator is required to demonstrate that the national solution harms and should be avoided,¹²⁴ which might be possible given the considerable differences in national UM protection and the potential effects for the internal market. Most notably, however, negative harmonisation would imply that UM protection as such is expendable. Although the arguments for UM protection appear to be rather weak, it is also not possible to conclusively say that UM systems generate negative net effects. Therefore, the EU cannot pre-empt or impose to repeal such national systems.

¹²⁰ Max Planck Institute 1994, 703.

¹²¹ Husovec 2020, 3.1.

¹²² Husovec 2020, 3.2 and 3.3.

¹²³ Stieper 2022, 28; Wichard 2022, 12.

¹²⁴ Husovec 2020, 2.

20.5.4.2 Policy Option 3: Positive Full Harmonisation

The second type of full harmonisation is positive harmonisation. A directive would describe and impose a full-fledged UM protection system in Member States under their national laws. All Member States would be required to implement exactly the same system enshrined in this directive. The EC intended to go down this road during the harmonisation efforts in the second half of the 1990s, after the initial idea to create a Community UM right had received strong headwind.

The approximation of national laws could be combined with a mutual recognition of national UM rights by the Member States, as already mentioned in the EC's Green Paper of 1995.¹²⁵ It would require the Member States to amend their own legislation to allow the applicant to request that his domestic UM is valid in another Member State and has similar effects there. However, this broader alignment would be hard to sell to the Member States as the registration of a national authority would go beyond the principle of territoriality with its effect in other Member States of the EU.

If the EU were to opt for a positive full harmonisation, national IP rights would still exist. The likelihood of continued porous protection would be reduced since inventors could apply cross-border for UM protection with similar national rights in all Member States. However, Option 3 would require the EU to take a positive stance on UM protection as per Option 1. As already discussed, the foundation for such a broad recommendation is rather weak.

20.5.4.3 Policy Option 4: Positive Minimum Harmonisation

Minimum harmonisation, in contrast, would not impose a specific system but rather set a minimum standard for the protection of UM that Member States could not fall below, for example requirements for protection or a minimum scope of protection provided by national UMs. The national law would need to implement these standards, but the individual Member States would have some leeway to exceed the terms of the directive in a defined direction.

The analysis of Option 4 is similar to that of Option 3. The major difference is that Option 4 gives Member States flexibility to react to national particulars with legislative choices. At the same time, however, this possibility might lead to the continuation of heterogeneous UM protection within the EU at least to a certain extent.

20.5.4.4 Policy Options 5 and 6: Opt-In Harmonisation (Minimum or Full)

A final policy option is opt-in harmonisation, whereby a Member State can freely decide whether it wants to maintain a UM system or not. However, should the

¹²⁵ EC 1995, 48.

Member State opt to protect UMs, the EU obliges the national system to conform to standards stipulated in the directive. The directive could have either a maximum/full or minimum harmonisation character meaning it could impose a specific framework that the Member State needs to implement (Policy Option 5) or merely define the key cornerstones of a UM system as minimum standards (Policy Option 6).¹²⁶ The main benefit of introducing opt-in harmonisation is to clarify the concept of a UM, especially with regard to existing secondary law of the EU, for example the IPCR and the IPED. As far as we are aware of, such an opt-in concept was not discussed by the EC during the 1990s.

Opt-in harmonisation does not force the EU to make a final decision on the establishment or maintenance of a UM protection system. It is for the Member States to make their own legislative choice. Given the inconclusive arguments for a UM protection system and its gap-filling function as an auxiliary tool to mainly non-harmonised patent systems, the national systems might be in the best situation to take such a decision.

If a Member State offers UM protection, users will be aware of the legal framework as it is the case in all Member States protecting UMs (Option 5) or at least they will be familiar with its key features which have to be the same (Option 6). An opt-in harmonisation would reduce, to some extent, the uncertainty deriving from the heterogeneous protection schemes currently existing in the EU. However, the general fragmentation and porous nature of protection with its detrimental effects on the single market would continue to exist. Furthermore, the EU would be required to set a proper, convincing and full-fledged blueprint for the design of national UM systems in the directive. As already mentioned above, this is hardly feasible given the gap-filling function of UM systems and the unharmonised area of patent law.

20.5.5 Recommendations

None of the policy options described above are entirely satisfying. All options except for the opt-in harmonisation would require a final stance by the EU on whether UM protection is positive or negative for the Member States. It is recommended that the Union refrains from such a decision as the general foundation of UM protection is ambiguous. There is no convincing argument for the introduction of a UM protection system in well-developed countries but there is also no conclusive argument that Member States should refrain from such protection. Moreover, designing a universal UM framework means filling gaps in the conspicuously heterogeneous national patent systems. Logically, before harmonising the UM framework, one would need to harmonise the patent system, but such an endeavour is not realistic at the moment.

If at all, harmonisation should address the different national laws by an opt-in harmonisation. This would leave the more general decision as to whether a national

¹²⁶ Radauer et al. 2015, 183.

system requires a sub-patent protection system to the respective Member State. An opt-in solution would clarify the concept of UM for the application and interpretation of the other EU's secondary law on IP, for example the Enforcement Directive. However, this option will not entirely resolve the existing problems of businesses working across borders within the single market. These entities would still be required to inquire whether a certain invention is protected by a national UM in all Member States relevant for their business to avoid the risk of hold-ups. It will, however, implement one single standard for the UM framework of the national laws.

The overall analysis suggests that the EU is not well advised in implementing any of the outlined policy options. At the same time, the status quo is unsatisfactory and calls for an EU harmonisation, as pointed out in Section 20.3. Hence, further research is required to formulate compelling solutions.

20.6 A NEW CONCEPTIONAL STARTING POINT

20.6.1 *Two Assumptions for Further Research*

Further research on the harmonisation of UMs within the EU should be based on two assumptions. Firstly, future efforts at harmonisation should embrace an outside-the-box thinking and consider a new understanding of the concept of UMs. As discussed above, one of the main reasons why UM protection within the EU is diverse is the lack of international harmonisation. At the same time, this vacuum offers a tremendous policy space to reflect on the understanding of UMs when defining a suitable UM policy for the EU.

Secondly, further research should not only aim at optimal policy options but also consider second-best solutions. The analysis above suggests that perfect results are not in sight as certain optimal conditions are incompatible. For example, not taking any stance on the design of UM laws and overcoming the heterogeneous forms of protection within the EU appears impossible.

20.6.2 *UMs as Remuneration Rights and Opt-In Harmonisation*

Given the unsatisfying policy options available, a valuable starting point for new research on the EU harmonisation of UM law might be a critical reflection on the basic concept of UMs. Legal entitlements can be protected with a liability rule instead of a property rule, as recognised by Guido Calabresi and Melamed in their seminal contribution on the methods of protection.¹²⁷ A liability rule does not prevent the use of an entitlement by a third party, but the right holder can ask for

¹²⁷ Calabresi and Melamed 1972.

a remuneration as a compensation.¹²⁸ Such mechanisms are particularly recognised in EU copyright law.¹²⁹

In the following, we will touch upon the idea of a system that enshrines a liability rule and understands UMs as remuneration rights. “Take-and-pay” approaches for UM law have not been discussed to a noticeable extent in Europe.¹³⁰ This lack of research does not come as a surprise as the existing UM protection systems of the Member States work with property rules. The US scholarship, however, has examined the protection of UMs by a remuneration right.¹³¹ The primary intention of these scholars is the reduction of barriers to markets¹³² – an idea that works particularly well also in the EU where a single market is subject to heterogeneous forms of UM protection with the respective negative effects on competition.

We will include this new conceptional starting point in the framework of the most promising policy options outlined above: an opt-in harmonisation. The decision on the protection of UMs will still be left for the Member States. Nevertheless, if a Member State protects sub-patentable inventions, it would have to implement a liability rule. Hence, the EU is not required to decide on whether Member States can or must protect UMs but, as a second-best solution, the directive will decide on the “how”. Therefore, the act would leave no national leeway when defining the effects of UMs (full harmonisation) while other features of the UM system could be subject to a mere minimum harmonisation.

20.6.3 *Addressing the Two Reasons for EU Harmonisation*

Above, we pointed out two reasons for the need for EU harmonisation of UM law. One of them related to the existing IP framework in EU law and the lack of a common understanding of a UM right when interpreting and applying this law (see Section 20.3.1). An opt-in harmonisation of UM protection would solve this issue as it would give a clear definition of the concept of an UM.¹³³

The second reason for EU harmonisation concerned the adverse impact of the diverse UM frameworks on the single market (see Section 20.3.2). Businesses are at risk to infringe national UMs if they aim to operate in multiple countries of the EU without conducting a proper and expensive FTO in each and every relevant Member State. Their concern to be caught in a hold-up has a detrimental effect on the free movement of goods and bears the potential to obstruct competition in

¹²⁸ Calabresi and Melamed 1972, 1092.

¹²⁹ See, e.g., Art. 5 (2) (a), (b) and (e) Directive 2001/29/EC.

¹³⁰ But see Takenaka 2021c (proposing a royalty-free statutory license for the German UM system as long as the licensee grants cross licenses).

¹³¹ See Reichman 1994; Janis 1999, 215; Reichman 2000, 1776; Reichman and Rutschman 2024.

¹³² See Reichman 2000, 1746; Reichman and Rutschman 2024, § II (including n. 25), and §§ IV.B. and C.

¹³³ At the same time, the proposed directive would need to clarify that UMs are not subject to the property rule enshrined in parts of the existing EU acts, e.g. Art. 9 and 11 IPED.

the internal market. The opt-in options discussed above (Policy Options 5 and 6) were able to address this issue only to a limited extent.

Obviously, the proposed concept of a remuneration right does not solve the existing problem for the single market entirely either. It does not overcome the fragmentation or porous UM protection within the EU. However, a liability approach will mitigate its effects as the extent of the negative effects are directly linked to the concept of UMs as exclusive rights. Remuneration in case an entity infringes an overlooked national UM in one part of the internal market creates fewer negative effects than a full-fledged exclusive right entitling preliminary and permanent injunctions and the risk of hold-up.¹³⁴ An understanding of UMs as remuneration rights has the potential to accommodate the interests of businesses better than a property rule regime. This is particularly true for SMEs which do not have the financial means to conduct EU-wide FTOs.

20.6.4 *Accounting for the Conceptual Differences with Patents*

Although the EU would be able to refrain from a general decision of UM protection, this proposal requires the Union to be convinced about the advantages of a liability rule over a property regime in UM law. A decision on the form of protection is less far-reaching than imposing a decision on the general existence of a UM protection system, particularly when choosing with liability rules an “intermediate form” of protection. Nevertheless, it is the potential trouble spot of this approach. Further research will need to examine the actual effects of such a concept for the European systems. At least to some extent, this research will be able to rely on the existing US literature.¹³⁵

Already now, it appears to be clear, that a liability rule will account better for the conceptual differences of patents and UMs. The prevailing consensus is that UMs are less robust than patents, with a lower threshold for protection, with a mere registration requirement, and with a pure gap-filling function to perform. It is therefore striking that UM holders are entitled to the same remedies as patent holders in the existing national laws and the EU framework.¹³⁶

UM protection systems appear to be one of the most appropriate systems of industrial property protection to work with a liability rule. In general, property rules have one main advantage over liability regimes: It is the form of entitlement which

¹³⁴ Cf. the US scholarship (arguing that liability rules avoid legal barriers for market entry by UMs): Reichman 2000, 1746; Reichman and Rutschman 2024, § II. (including footnote 25), IV.B. and C.

¹³⁵ Reichman 1994; Janis 1999, 215; Reichman 2000, 1776; Reichman and Rutschman 2024.

¹³⁶ For the national laws, see the chapters on the different countries in this book. For the EU approach, cf. Art 2(1) IPED (“measures, procedures and remedies provided for by this Directive shall apply [...] to any infringement of intellectual property rights”) which includes UMs in the scope of its application.

gives rise to the least amount of state intervention after the grant of a right.¹³⁷ It is for the parties to agree on a price for the usage of the protected subject matter while liability rules require some organ of the state to determine a value.¹³⁸ Hence, one could fear that shifting the existing property rule approach to a liability regime would increase the involvement of the judiciary in UM disputes. However, unlike most patent systems worldwide, the existing sub-patent protection systems work without pre-grant examination. These protection mechanisms are already court-intense in their design. The validity of the entitlement has not been examined by an IP office. The structure of the system leaves it for the *post*-registration phase and therewith for the courts to assess the protectability of the subject matter if a dispute arises.

20.6.5 *Fulfilling the Auxiliary Function and Curing the Patent System*

One concern of the Member States might be whether UMs as mere remuneration rights will still be able to fulfil their intended auxiliary function. UM protection systems are devised to cure gaps in the patent protection (“cheaper”, “faster”, “lower”). However, as briefly discussed above in Sections 20.4.1 and 20.4.2, the Member States have sufficient leeway to improve their national patent system if needed to provide for cheaper and faster protection. For example, if a Member State wants to offer cheaper access to IP protection to accommodate the needs of SMEs, it can offer fee discounts for such patent applicants. Moreover, if a Member State wants to offer faster protection for technical inventions by a property rule, e.g. already during patent prosecution, it could offer patent applicants access to interim injunctions if a preliminary assessment of the court deems the subject-matter patentable. Hence, Member States will need to internalise some of the auxiliary functions (“cheaper”, “faster” protection) performed by their existing national UM systems in their patent systems if they think that a property rule is required.

As a core result of such a directive, the Member States will not be able to offer a full exclusive right for inventions which do not fulfil the requirements of patent protection (“lower” protection). The national systems will need to accept the imposed remuneration approach if they opt for a UM protection system. It is unclear whether this could be a major concern for Member States. It is difficult to imagine cases in which compensation as protection is not sufficient to protect sub-patentable inventions that do not fulfil the requirements of patentability. This idea aligns with the broader consensus that stronger rights come with more stringent requirements. It is well-recognised in copyright law where neighbouring rights tend to protect less original subject matter with a more limited set of rights.

¹³⁷ Calabresi and Melamed 1972, 1092.

¹³⁸ Calabresi and Melamed 1972.

20.6.6 *The Structure for Remuneration*

There are two ways in which the proposed directive could implement a structure for remuneration. The directive might foresee the establishment of a collection society. Such bodies relieve the burden on individuals to enforce their own rights within the realm of copyright law.¹³⁹ UMs are registered rights which facilitate the collective management of royalties. However, setting up and running such organisations entail high administrative costs.

As an alternative, the directive could enshrine a compensation claim of the right holder against the user of a UM. The burden of enforcement of such an individual claim would lie on the right holder. Therefore, we recommend that the directive works with incentives that users inform the right holder about their exploitation of the UM (“notify-and-use”). This could be achieved by an obligation of the user to inform the right holder prior to the use or shortly thereafter. If not informed, the right holder will be entitled to claim double compensation.

20.7 CONCLUSION

In the last decades, the EU made tremendous efforts to approximate national IP laws and introduce unitary EU IP rights. Nevertheless, the realm of UM law has remained untouched, despite the various attempts of the EC during the 1990s. The UM protection in the EU is currently fragmented and porous since some Member States have UM protection systems in place while others do not. The existing systems also lack any homogenous understanding as to many core features of UM protection. The lack of harmonisation is surprising as UM systems are traditionally intended to offer protection for SMEs and the EC has repeatedly emphasised their importance for the European economy.

The concept of the single market and the existing EU IP framework call for a harmonisation on an EU level. The current situation builds obstacles to the free movement of goods and has the potential to distort competition due to the risk of hold-ups for businesses, particularly SMEs, which are supposed to be the core beneficiaries of UM systems. Moreover, the lack of a common understanding of UMs leads to problems in the interpretation and application of the EU’s secondary laws that refer to UMs without defining their concept.

The EU can harmonise UM protection either by a regulation or a directive based on Art. 114 or 118 TFEU. However, none of the policy options at hand are entirely convincing. Most of the options would require the EU to take a final decision on the

¹³⁹ For the benefits of such a collective management, see Nérissou 2017, 75. Most recently, Reichman and Rutschman have proposed collective management of royalties if the US were to implement a sub-patentable innovation system. See Reichman and Rutschman 2024, Part III. C. 3 and Chapter 16 (United States).

existence of a national or EU UM protection system. Such a step cannot be recommended as the arguments for UM protection are to a certain extent ambiguous. UM systems perform a gap-filler function to overcome shortcomings of the patent system and most of the gaps could be dealt with by amending patent legislations instead of maintaining a sub-patent protection system. Moreover, there appears to be no conclusive evidence that the protection of inventions under lower standards than the patent system is contributing to public welfare in highly developed economies. At the same time, one can also not argue convincingly for the abolishment of UM protection systems. There is no proof that the social costs of UM systems offset their positive effects in the Member States. The best option appears to be an opt-in harmonisation of national UM systems which avoids a decision on the general existence of UM laws by the EU. However, it would not solve the negative effects of the fragmented and porous UM protection within the EU entirely. Moreover, it would require the EU to design a full-fledged gap-filling system in a constellation where the patent system as the main system is varying from Member State to Member State.

This dilemma leads to two assumptions: Further research should reconsider the basic concept of UMs when reflecting on EU harmonisation. Thereby, it should also consider second-best solutions. A new conceptional starting point might be an opt-in harmonisation of national UM systems requiring the Member States to shift from a property rule regime to a liability rule if they want to implement or maintain an UM protection system. This approach would address both reasons for an EU harmonisation. Particularly, a mere remuneration for UM usage by third parties would reduce the negative effects of the fragmented and porous UM protection in the single market. The Member States would be required to fill the existing gaps in their patent system with patent-inherent means. Although the EU would not be forced to take a final decision on the existence of UMs in the EU, it would impose a compulsory remuneration scheme. Further research will need to investigate whether the EU should feel comfortable in doing so.