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A TURBULENT PATHWAY TO UNIFORM PATENT PROTECTION IN THE EU***

ABSTRACT. This article aims to critically explore the legislative evolution towards the Unitary Patent System in the EU and place it in a contextual setting. In particular, attention is paid to changes of priorities regarding the patent protection and the potential to support the innovativeness and competitiveness. Considering its recent launching, a pioneering observation of its application is added.

CONTENT. 1. Introduction -2. History of selected aspects of the patent protection in Europe. -3. The standpoint of the EU - pro-sustainability and pro-IP. -4. The legislative evolution towards the Unitary Patent System (UPS). -5. The three pillars legal structure of the UPS. -6. Key features of the UPS and their potential to boost the innovativeness and competitiveness.

- 7. Pioneering observations about the UPS application. - 8. Conclusions.

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1. Introduction

The documented recognition of usefulness of ideas about the solution of technical problems goes back to antiquity and perhaps even before that. Many of these inventions turned into innovations which paved the way for the success of the Roman Empire and which are benefitting society even two thousand years later, see the use of concrete, the building and employment of aqueducts or the extension of the transportation framework by four layers roads with drainage and arches-bridges. Similarly, the trade from the Ancient and Phoenician monetarization are recognized as a valuable contribution to the current understanding of the market economy. As a matter of fact, modern European integration is built upon the famous four freedoms, the current EU policies and statements keep proclaiming the EU determination to be the top innovative and competitive economy and the EU law is shaped accordingly. In 2023, one of the leading, if not the top, EU law mechanisms to boost innovations and competitiveness of the EU is the newly launched unitary patent system (UPS). A great deal of effort and hope has been placed into it and the question is whether this was a foolish waste of time or a smart strategic step or something in between. In order to address this burning issue, it is necessary to overview selected aspects of the history of patent protection in Europe (Section 2), to appreciate the stand-point of the EU (Section 3), to understand the legislative evolution towards the UPS (Section 4), to overview the three pillars structure of the UPS (Section 5), to discuss its key features and their (lack of) potential to boost the innovativeness and competitiveness in the EU (Section 6) and to bring pioneering observations about its fresh application (Section 7). Such a plethora of information and arguments culminates with conclusions (Section 8).

2. History of selected aspects of the patent protection in Europe

The patent protection of inventions in the territory of Europe has an almost one millennium long history. In central Europe, the discovery of silver led to a bustling development of the mining industry, which was facilitated by the invention and employment of new mining machineries and technologies, such as water pumping systems. These inventors were granted *privilegia*, such as in the case of Konrád z Kamene (Conratus de Lapide) and Luso z Krásné Hory (Luso de pulchro Monte) who received such a privilege in 1315 for a water draining mechanism used to facilitate silver excavation.2 The transforming of this invention covered by the privilege into an innovation was done based on an agreement between these two inventors with Heinrich Rothermel to build and operate, at their own expense, a complex water drawing system in mines in Staré Hory (Altenberg), nowadays part of Czech city of Jihlava (Iglau). Interestingly, this agreement was confirmed by King John of Bohemia, the inventors were as well investors and allegedly this invention was, along with other inventions for mining 'exported' abroad, first into Saxony and later on in further German lands and other neighboring territories.3 The successful spread and use of these innovations is documented, but not the exact features of the applicable law and the (lack of) enforceable legal protection. By then, the Bohemian law focused on another priority – the royal monopoly on the silver excavation and the concessionary method with *urbura*, see the move from customary law to the pioneering code in this field, Ius regale montanorum or Constitutiones iuris metallici aka the Royal mining law aka the Mining Code of King Wenceslaus II from 1300. It was prepared by an Italian professor of law, Gozzius di Orvieta, and as such it was inspired by the Roman law and covered labor, trade, monetary and even procedural aspects⁴ and several of its parts remained valid and

¹ Radka MacGregor Pelikánová, 'International Intellectual Property Rights and Their Enforcement in the Czech Republic' (2010) 1 Journal on Legal and Economic Issues of Central Europe 1, 15.

² David Zimola, Karel Malý and Petr Hrubý, 'Rantířovský vodní náhon', Encyklopedie (2012) https://encyklopedie.ji.cz/home-mmj/?acc=profil_lokality&load=82> accessed 31 July 2023.

³ MacGregor Pelikánová (n 1) 15.

⁴ Roman Zaoral, 'The Management of Papal Collections and Long-Distance Trade in the Thirteenth-Century Czech Lands' (2015) 127 Moyen Age International Review of Applied Economics 2 <a href="https://www.researchgate.net/publi-p

applicable up to the 19th century.⁵

The employment of the patent in relation to useful ideas about the solution of technical problems has even clearer parameters in Renaissance Italy. In Florence, Brunelleschi's invention of the structure of a boat to carry marble up the Arno River was applied for and obtained a privileged monopoly protecting this invention in 1421.6 In Venice, for decades only a few ad hoc privileges for new inventions related to mineral extractions were granted by the Venetian government until 1474.7 However, then a milestone occurred, on the 19th of March, 1747, the Venetian senate passed by a large majority a parte (act) regulating the patent application and granting process and laid down the foundation of modern patent systems in Europe and even beyond.8 Patent applications were filed with the Doge of Venice and the Senate (Senato) and after an evaluation by experts, the Senate made the decision about the approval of such patents. Unlike current patents, Venetian patents provided both negative rights aka monopoly rights to exclude others from the exploitation of the invention, and positive rights to enter into craft guilds. In addition, medieval guilds were so powerful that even this Venetian patent law allowed them to oppose and block patent applications.9 Consequently, the level of patenting had varied substantially across guilds and naturally guilds were inclined to prevent patenting by other members and external innovators. 10

Indeed, the patenting process and its results in the early modern period led in

cation/283562396_The_management_of_papal_collections_and_long-distance_trade_in_the_thirteenth-century_Czech_lands.> accessed 31 July 2023.

⁵ MacGregor Pelikánová (n 1) 15-18.

⁶ Bronwyn H Hall, 'Patents, Innovation, and Development' (2022) International Review of Applied Economics https://www.tandfonline.com/doi/full/10.1080/02692171.2021.2022295 accessed 31 July 2023.

⁷ Stefano Comino, Alberto Galasso and Clara Graziano, 'The Diffusion of New Institutions: Evidence from Renaissance Venice's Patent System' (NBER Working Paper No 24118, 2017) https://www.nber.org/papers/w24118 accessed 31 July 2023.

⁸ John M Golden, 'Patent Privateers: Private Enforcement's Historical Survivors' (2013) 26 Harvard Journal of Law and Technology 545.

⁹ Francesca Trivellato, 'Guilds, Technology, and Economic Change in Early Modern Venice' in Stephan R Epstein and Maarten Prak (eds), *Guilds, Innovation and the European Economy, 1400-1800* (CUP 2008) 199-231.

¹⁰ Comino, Galasso and Graziano (n 7).

Europe to situations hardly supporting innovations and competitiveness. On one hand, inventions representing progress did not lead to patents, on another hand there were patents granted for inventions hardly supporting technological or other advancements, see eg patents for playing cards and/or their reversible appearance in England in the 18th century or labelling the introduction of tarot cards in Italy in the 15th century as an invention.¹¹

Despite these excesses, there is no doubt that patents have noticeably contributed to the industrial revolution, to the increase of consumer welfare despite the (risk) of monopolistic pricing¹² and to the economic dominance of Western civilization in the 19th and 20th centuries.¹³ A positive factor was the increase of transparency and information in the 18th century, when patent rules, regulations and processes started to demand a written description of the solutions, ie a written application describing the invention became a pre-requirement for the granting of a patent (UK since 1718 and USA since 1790).¹⁴ This technically strategic move led to a decrease of capricious, vague and useless ideas missing novelty, the inventive step and industrial utility. At the same time, a proper national recording allowed for the evolution towards, mutual recognition, the harmonization of national, regional and even international systems and even to the global treatment of intellectual property.

In 1883, the foundation of such a system was laid down by the signing of the Convention for the protection of industrial property in Paris (Paris Convention), while other international treaties and conventions followed and, since 1970, are administrated by the World Intellectual Property Organization (WIPO) based on the Convention establishing WIPO which was signed in 1967 in Stockholm. In 1974, WIPO joined the United Nations (UN). Among the 26 international treaties currently administrated

¹¹ The International Playing-Card Society, 'An Introduction' https://www.i-p-c-s.org/wp/an-introduction/ accessed 31 July 2023. See also Michael Dummett and John McLeod, *A History of Games Played with the Tarot Pack. The Game of Triumphs*, vol 1 (The Edwin Mellen Press 2004).

¹² Petra Moser, 'Patents and Innovation: Evidence from Economic History' (2019) 27 The Journal of Economic Perspectives 1, 23.

¹³ Richard J Sullivan, 'The Revolution of Ideas: Widespread Patenting and Invention During the English Industrial Revolution' (1990) 50 The Journal of Economic History 2, 349.

¹⁴ Hall (n 6).

by WIPO are, as well, patent treaties, such as the Patent Law Treaty signed (PLT) or even more importantly the Patent Cooperation Treaty (PCT). Under the auspices of the World Trade Organization, the enforcement of patent protection was further boosted in 1995 by the Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS).

In 1970, the Patent Cooperation Treaty signed was signed in Washington (PCT) allowing for the seeking of patent protection for an invention simultaneously in each of a large number of countries by filing an 'international' patent application with the national patent office or with with the International Bureau of WIPO in Geneva.

In 1973, the European counterpart (and perhaps, competition), the European Patent Convention (EPC) was signed in Munich. The EPC is a special agreement with a basis on Article 19 of the Paris Convention from 1883 under the auspices of the Council of Europe. The EPC basically both parallels and overlaps the international treaty with the Washington PCT from 1970. They both coordinate the filing of (international) application(s), the research with an examination and leads to the granting of individual national patents. ¹⁵ Plainly, based on applications, filed pursuant to national laws with national offices or filled directly via the EPC with the EPO or filed in cooperation with the PCT, the EPO can perform the substantive examination and publication and grant a European patent, which is not centrally enforceable per se.

These international treaties, along with other international law instruments have dramatically contributed to the global harmonization of intellectual property regimes and intellectual property rights protection and enforcement, among other features, by establishing international standards for patents¹⁶ and pushing for an objective assessment of inventions regarding their novelty and usefulness as introduced by the Venetian patent law.¹⁷

¹⁵ ibid.

¹⁶ ibid.

¹⁷ Daniele Aribugi and Andrea Filippeti, 'The Globalisation of Intellectual Property Rights: Four Learned Lessons and Four Theses' (2010) 1 Global Policy 2, 137 https://doi.org/10.1111/j.1758-5899.2010.00019.x accessed 31 July 2023.

3. The standpoint of the EU – pro-sustainability and pro-IP EU

Sustainable development and IP are firmly anchored in the EU policies and law. Regarding EU policies, there needs to be emphasized the Europe 2020 Strategy for smart, sustainable and inclusive growth, which was launched by the Barroso Commission in 2010¹⁹ and aimed at creating an economy based on knowledge and innovation in 2020, which should have been the most competitive in the world. Well, this was not completely achieved, but new policies in a similar tenor keep emerging. Regarding the EU law, the EU constitutional triangle entails the Treaty on EU (TEU), Treaty on Functioning of the EU (TFEU) and Charter of Fundamental Rights of the European Union, and clearly proclaims them. Specifically, it declares that, 'The Union's aim is to promote peace, its values and the well-being of its peoples' (Article 3.1 TEU) and that:

The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance.²²

European Commissions, in particular the current Commission under the presidency of Ursula von der Leyen, attempt not only to reconcile the sustainability

¹⁸ Eurostat, 'Sustainable Development in the European Union – Monitoring Report on Progress Towards the SDGs in an EU Context' (2023) https://doi.org/10.1111/j.1758-5899.2010.00019.x accessed 31 July 2023.

¹⁹ European Commission, 'Communication from the Commission Europe 2020. A Strategy for Smart, Sustainable and Inclusive Growth' (COM/2010/2020, 3 March 2010) https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:52010DC2020 accessed 31 July 2023.

²⁰ Radka MacGregor Pelikánová, 'R&D Expenditure and Innovation in the EU and Selected Member States' (2019) 15 JEMI 1, 13 https://doi.org10.7341/20191511 accessed 31 July 2023.

²¹ Nina Bockova and Tomas Meluzin, 'Europe 2020 Indicator: Research And Development In Czech Manufacturing' in *Proceedings Of 14th International Scientific Conference: Economic Policy In The European Union Member Countries* (Petrovice: Silesian Univ Opava 2016).

²² Article 3.3 TEU.

and IP demands, but even advance them in a synergy as pivotal instruments to support modern European integration. Consequently, IP concerns became an integral part of the sustainability discourse and they are projected in one of six categories of Corporate Social Responsibility (CSR) with an impact on companies' strategy and even have the capacity to be a springboard for the Creation of Shared Values (CVS).

The EU is committed to the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), adopted by the UN General Assembly in September 2015. It needs to be emphasized that SDG 8 is to promote inclusive and sustainable economic growth and SDG 9 is to build resilient infrastructure, promote inclusive and sustainable industrialization and to foster innovations. Further, it needs to be emphasized that the current EU and its member states work closely with WIPO, adhere to international treaties managed by WIPO, and consent with the WIPO motto 'Intellectual property is improving the lives of everyone, everywhere'. Similarly, the current EU and EU member states work closely with WTO, adhere to TRIPS and consent with the WTO motto 'Let's narrow the gaps in the way intellectual property rights are protected and enforced around the world'. In sum, the EU is deeply convinced IP, including inventions protected by patents, is a pre-requirement for sustainable development, competitiveness in the single internal market and for the EU's prosperity.²³ Inventions are the result of creative human intellectual activity, often vested in the form of an idea which can either be kept as a secret or which can be an invention to be shared and protected – and conventionally this 2nd option is considered as a better option for society in the long run, while for inventors their combination appears as the best.²⁴ 'Neither do men light a lamp and put it under the bushel, but on the stand; and it shine'. 25

Inventors should be able to effectively and efficiently submit patent applications regarding their inventions which are new, not obvious, usable and not in a breach of public policies with appropriate patent offices in order to get a monopolistic power to

²³ Radka MacGregor Pelikánová, 'R&D Expenditure' (n 20).

²⁴ Dirk Crass and others, 'Protecting Innovation Through Patents and Trade Secrets: Evidence for Firms with a Single Innovation' (2019) 26 International Journal of the Economics of Business 1, 117 https://doi.org/10.1080/13571516.2019.1553291 accessed 31 July 2023.

²⁵ Mt: 5:14.

exploit the economic benefits associated with the invention and to exercise veto power. Europeans know about this and have used various national, regional and international patent (granting) systems. According to some, they have been getting easily too much protection and monopolistic power, according to others they have been getting, at a very high cost a weak and not truly enforceable protection. A proper balancing is the key. Namely, the EU and its key institutions realized that having an effective and efficient system for granting patents for the entire EU would be a great win-win situation and could help the EU and Europeans in the global market place. Having to set and operate such a system in the economically and culturally diversified EU has, however, been a daunting task for a long period of time. The legislative evolution towards the UPS was neither short nor smooth... and as of today it is still not perfectly completed.

4. The legislative evolution towards the Unitary Patent System (UPS)

The Unitary Patent System (UPS), with the European patent with unitary effect ('unitary patent') and the specialized patent court(s), is a decades long project which has encountered a lot of resistance and obstacles and, with a materialization on 1st June 2023, might appear as the unexpected and re-imposed dictate from the European Commission with only a little practical significance. In the reality, the effectiveness and efficiency of the UPS to support the innovations and competitiveness is critical of the EU which desires to be both pro-sustainable and the leading world economy. This, despite, or perhaps inspire, ongoing crises... Well, let's see how the entire UPS saga started and evolved.

The starting point is clear. Neither the PCT nor the EPC nor the TRIPS leads to the granting of an 'international patent' or a 'European patent' covering automatically, and on an ongoing basis, the territory of more than one state. These are just tools,

²⁶ Francesco P Appio and others, 'Patent Design Strategies: Empirical Evidence from European Patents' (2022) 181 Technological Forecasting and Social Change https://www.sciencedirect.com/journal/technological-forecasting-and-social-change/vol/181/suppl/C accessed 31 July 2023.

²⁷ MacGregor Pelikánová, 'R&D Expenditure' (n 21).

indeed very useful tools, to get a bundle of national patents requiring individual treatments, such as renewal requests, payment of annual national fees, communicating with various languages, etc. Naturally, this creates obstacles for the establishment and operation of the Single internal market as defined by the TEU and TFEU. In addition, the US as the economic competitor of the EU has a unified patent system and its USPTO grants patents for the entire US territory. Indeed, this was realized already before the establishment of the original three European Communities. In 1949, French Senator Henri Longchambon proposed a unitary patent system for Europe.²⁸ In 1962, the Commission of European Economic Community published a draft of the EPC in hopes of reaching a 'communautaire' patent system.²⁹ As a matter of fact, the EPC was signed as the Munich convention under the auspices of the Council of Europe, because by then not all European Communities member states had ratified (of course now, all EU member states have ratified the EPC).³⁰ Since the EPC was and remained 'only' a foundation how to get a bundle of patents, not one single unitarian patent, in 2000 the Prodi Commission presented its first proposal on a Council Regulation on the Community patent. For a myriad of reasons this project was not materialized.

In 2007, the Barroso Commission issued the Communication of the Barroso Commission labeled 'Enhancing the Patent System in Europe' which emphasized the commitment to the creation of a single Community patent. In 2007, the Lisbon Treaty was signed, re-shaped the EU constitutional framework and brought TEU and TFEU as we know currently. The focus moved to the recognizing the EU competence to set up a uniform intellectual property protection (Article 118 TFEU) via a special legislative procedure.³¹ However, opening the door, does not mean to get there. In 2010, the

²⁸ Karen Walsh, 'The Unitary Patent Package, the Court of Justice of EU, and Brexit: (Ir)reconciliable?' (2019) Journal of Intellectual Property Quarterly https://ore.exeter.ac.uk/repository/handle/10871/36176 accessed 31 July 2023.

²⁹ Lisa Van Dongen, 'The UPC Agreement and Liability Rules. The Entitlement and Enforcement' (2018) https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=2700946 accessed 31 July 2023.

³⁰ Luc Desaunettes-Barbero and others, *The Unitary Patent Package & Unified Patent Court. Problems, Possible Improvements and Alternatives* (LediPublishing 2023).

³¹ Katharina Kaesling, 'The European Patent with Unitary Effect – A Unitary Patent Protection for a Unitary Market?' (2013) 2 UCL Journal of Law and Jurisprudence 1, 87 https://doi.org/10.14324/111.2052-1871.004 accessed

Barroso Commission presented its proposal about the translation regime for the EU patent, see Regulation setting up the language mechanism. A massive wave of objections against it closed this classic pathway to the UPS based on conventional EU Regulation(s). Plan A failed, so plan B to go via enhanced co-operation was put to work.

In 2011, the procedure leading to the enhanced co-operation was launched by 25 EU member states, while Spain and Italy strongly objected to the fact that the UPS languages should only be English, French and German.³² In addition, the CJ EU issued its opinion, stating that the draft Agreement creating the European and Community Patent Court would be incompatible with EU law. The final straw came from the EU member states themselves, which could not agree about the location of the Central Division of a Unified Patent Court. For almost one year the battle went on about whether this would be London, Munich or Paris, and, pursuant to a resulting compromise, all three cities should be the seat, with Paris being the main seat and London and Munich being attached via modern technologies. However, the CJ EU remained concerned about the (possible removal of its) agenda in favor of such a new court. At the same time the European Commission emphasized that the protection of intellectual property is a key factor for EU competitiveness, that between 44% and 75% of European businesses' resources are connected to the intellectual property and that the current patent protection in the EU was (and is) fragmented and did not fully support the establishment and operation of the Internal single market without barriers.³³

In December 2012, a compromise was reached about a limited role for the CJ EU, ie the proposed UPC was to be set to apply the Agreement on UPC which is considered an international patent law. This was a compromise between the CJ EU drive to play a key role and the slightly shaken reputation of the CJ EU regarding its rather controversial decisions about patent law.³⁴

During the years 2012-2015, Italy and Spain kept challenging this enhanced co-operation, especially the legal basis in Article 118(1) TFEU and the suggested

³¹ July 2023.

³² ibid.

³³ ibid.

³⁴ Walsh (n 28).

languages' selection for the UPS by the CJ EU, eg C-274/11 & C-295/11 *Italy v Council*; C-146/13 & C-147/13 *Spain v Council of EU*.³⁵ In 2015, all these cases were dismissed, Italy decided to become a participant in the EPS (but not Spain) and the three pillars structure of EPS, as we know currently, was established:

- (a) a Regulation creating a European patent with a unitary effect, aka a unitary patent,
- (b) a Regulation establishing a language regime applicable to the unitary patent and
- (c) an Agreement between the EU countries to set up a single and specialized patent jurisdiction, aka the UPC Agreement.

In 2013, Croatia became part of the EU but did not join the EPS, while in 2020 the UK left the EU and the EPS. Since Poland declined to ratify the UPC Agreement, the number of EU member states going to national ratification process is 24. As of January 2013, 17 of them did it, ie they had ratified the UPC Agreement and the Protocol on the Provisional Application of the UPC Agreement. These 17 Member States represent approximately 80% of the EU's GDP.

The remaining seven (Cyprus, Greece, Hungary, Ireland, Romania and Slovakia) may ratify later on and the three non-signatories (Croatia, Poland, Spain) can sign and ratify it later on as well.³⁶ However countries who are member states of the EPC, but who are not in the EU (for example, the UK, Switzerland and Norway) are not able to join the Unitary Patent or Unified Patent Court. European patents granted by the EPO

³⁵ [2015] ECR 213/07 – action for annulment under Article 263 TFEU, brought on 22 March 2013 ('[T]]he Council's decision, with respect to the establishment of the translation arrangements for the EPUE, to differentiate between the official languages of the European Union, and to choose only English, French and German, is appropriate and proportionate to the legitimate objective pursued by that regulation... Article 118 TFEU does not preclude, when the language arrangements for European intellectual property rights are being determined, reference being made to the language arrangements of the organization of which the body responsible for issuing the intellectual property right to which unitary effect will be attributed forms part. It is moreover of no relevance that the contested regulation does not establish an exhaustive body of rules for the language arrangements applicable to the EPUE. The second paragraph of Article 118 TFEU imposes no requirement on the Council to approximate all aspects of the language arrangements for intellectual property rights established on the basis of the first paragraph of Article 118 TFEU... Action dismissed').

³⁶ Unified Patent Court, 'UPC Member States' < https://www.unified-patent-court.org/en/organisation/upc-member-states> accessed 31 July 2023.

will still cover these countries, but they will need to be validated, maintained, and enforced separately in each of them, as until now.

On the 1st of June 2023, the new UPS started to operate and covers 17 EU member states, who have ratified the Agreement on the UPC. Namely, the condition of the ratification by 13 EU member states, including three states with the most European patents³⁷ (Germany, France and, before Brexit, the United Kingdom, and after Brexit, the Netherlands) was met and so the entire package of UPS was activated... but just for those EU member states, which have ratified the Agreement on UPC.

The new Unitary Patent is based on the European patent granted by the EPO under the rules of the EPC to which adhere 39 states. The pre-grant phase remains the same, but once EPO European patent is granted, the patent proprietor can request unitary effect, thereby getting a European patent with unitary effect (Unitary Patent), that provides uniform patent protection in initially 17 EU Member States.

5. The three pillars legal structure of the UPS

In 2012 the Barroso Commission managed to get the consent of both the Council and Parliament on the (new) patent package consisting of two Regulations and one international agreement representing the three pillars of the UPS and becoming an integral part of an interesting law structure combining national law, regional law and international law.

These three pillars are crucial for the post-grant/validation stage, because the application phase with formal examination (0-18 months) remains governed by national patent laws and/or EPC 2000 and the pre-grant phase with substantive examination (18 months – 3rd or 4th year) remains governed by EPC 2000 and its Protocols. Only during the post-grant/validation state (3rd or 4th year – 20th year), the choice emerges – either to take the classic pathway of bundle of national patents governed by national laws or to take advantage of the UPS governed by two Regulations along with secondary legislative instruments and one international treaty. They form the three pillars legal

³⁷ Kaesling (n 31).

structure of the UPS.

The first pillar of the UPS is Regulation (EU) No 1257/2012 of the European Parliament and of the Council of 17 December 2012 implementing enhanced cooperation in the area of the creation of unitary patent protection,³⁸ which was enacted based on proposal COM (2011) 215. This Regulation includes 18 articles and establishes a unitary European patent with a unitary effect, unitary character, uniform protection and equal effect in all of the participating Member States, ie a unitary patent may only be limited, transferred or revoked, or lapse, in respect of all the participating EU member states (Article 3 Regulation 1257/2012). It does not replace the EPC and EPO's system, but instead the UPS uses the existing structures of EPO (Article 9(1) Regulation 1257/2012) and co-exists, ie Regulation 1257/2012 is a special agreement (Article 142 EPC).³⁹ This is logical, considering the success of the EPS.⁴⁰

The second pillar of the UPS is and Council Regulation (EU) No 1260/2012 of 17 December 2012, implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements, which was enacted based on proposal COM (2011) 216. This Regulation includes only seven articles and specifies that the language of the proceedings for the European patent with unitary effect (EUP) is the language used in the proceedings before the EPO as defined in Article 14(3) EPC (Article 2 Regulation 1260/2012) and basically no further translations are required (Article 3 Regulation 1260/2012). The official languages of the EPO are English, French and German (Article 14(1) EPC), a European patent application must be filed in one of these three official languages (Article 14(2) EPC) and the official language in which the European patent application is filed is the language of the proceedings.

The first pillar and the second pillar of the UPS are clearly products of internal EU law, namely these Regulations represent EU (primary) legislation. In addition, the

^{38 [2012]} OJ L 361, 1-8 (Regulation 1257/2012).

³⁹ Kaesling (n 31).

⁴⁰ Desaunettes-Barbero and others (n 30).

⁴¹ [2012] OJ L 361, 89-92 (Regulation 1260/2012).

instruments of the EU secondary legislation were issued to complement these Regulations. 42 Namely, the Select Committee of the Administrative Council of the EPO adopted the Rules relating to Unitary Patent Protection (OJ EPO 2022, A41), which provide for the establishment of a Unitary Patent Division at the EPO and which lay down the procedures to be carried out by the EPO under EU Regulations No 1257/2012 and No 1260/2012. Further, this Committee adopted the Rules relating to the Fees for the Unitary Patent Protection (OJ EPO 2022, A42) and concerning the compensation for the translation costs for SMEs, universities, non-profit organizations and public research organizations, which file a European patent application in an official EU language other than English, French or German. Based on Article 18 Regulation 1257/2012 and on Article 7 Regulation 1260/2012, the applicability of these Regulations depends on the entry into force of the Agreement on UPC. This is interesting, since the Regulations are outcomes of internal sources of the EU law (secondary law), whereas the Agreement on UPC is an international intergovernmental treaty between EU member states which is open to EU Member States only and which places the UPC within the EU legal system.⁴³ A similar situation happened in 2017 regarding the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled (the 'Marrakesh Treaty') in the field of copyright law. This is international treaty, whereas the related Directive 2017/1564 and Regulation 2017/1563 are the secondary EU law documents.

The third pillar of the UPS is the Agreement on a Unified Patent Court of 19 February 2013,⁴⁴ which is a rather long treaty including 89 articles and two Annexes. It provides for a UPC for the settlement of disputes relating to European patents and (European) unitary patents (Article 1 Agreement on UPC). The UPC comprises a Court of First Instance, a Court of Appeal and a Registry (Article 6 Agreement on UPC) and they are populated by both legally qualified judges and technically qualified judges

⁴² European Patent Organization, 'Unitary patent & Unitary court' https://www.epo.org/applying/european/unitary/unitary-patent/legal-framework.html accessed 31 July 2023.

⁴³ Lisa Van Dongen, 'The UPC Agreement and Liability Rules. The Entitlement and Enforcement' (2018) https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=2700946 accessed 31 July 2023.

^{44 [2013]} C 175/01 (Agreement on UPC).

(Article 15 Agreement on UPC). The UPS shall apply the EU law and respect its primacy (Article 20 Agreement on UPC) and the decisions of the CJ EU, including preliminary rulings, are binding for the UPC (Article 21 Agreement on UPC). The substantive law applied by the UPC includes EU law (especially three pillars of UPS), the EPC, other international agreements applicable to patents and binding on all the Contracting EU member states and national law (Article 24 Agreement on UPC). As mentioned above, so far 17 EU member states have signed and ratified the Agreement on UPC.⁴⁵

6. Key features of the UPS and their potential to boost the innovativeness and competitiveness

The UPS provides an option to avoid the need of validation and the management of bundle of patents governed by various national (more or less harmonized) patent laws. This is done by taking a special route by the EPO and by being a subject of a pre-set linguistic, fees and enforcement regimes. Plainly, instead of à la carte, one procedure with one language (English, French, German) and one payment is needed.

Regarding the administration, the UPS for sure ends complex validation and byzantine bureaucratic national requirements, instead of a number of proceedings and a number of payments, only one proceeding and one bulk payment every year is needed. Therefore, the UPS reduces the administrative demands and increases customer friendliness, ie decreases the administrative burden related to the maintenance of patents with the desired validity for more than one jurisdiction. In sum, the EPS makes the management of a patent as a legal title easier.

Regarding the cost, the situation is more complex and administrative cost, renewal fees and translation expenses needed to be considered. For administrative costs, a myriad of circumstances need to be considered, such as whether the renewal is done

⁴⁵ European Patent Organization, 'About the Unified Patent Court' https://www.unified-patent-court.org/en accessed 31 July 2023.

in-house or via external specialists. For officially paid renewal fees, it depends for which jurisdictions the patent protection is needed, see the EPO's 'True Top 4' math, ie the annual fee for the renewal of the unitary patent corresponds to the sum total of the renewal fees paid for national renewal in the four countries in which European patents are most frequently validated (Germany, France, the UK and the Netherlands). For translation expenses, the cost advantage depends again upon for which and how many jurisdictions should the patent be valid. In sum, if patent management is done in house and patent should by only for few jurisdictions with official low renewal fees and/or jurisdictions using the language of the patent application, then the EPS might not be cost advantageous.

Regarding the provided protection, again the assessment is complexed. All EU member states participating in the Unitary Patent System should provide a uniform protection on a one-stop-shop basis, which should make the enforcement more effective and efficient. Well, the Unified Patent Court (UPC) and its case law should contribute over time to an increased predictability, naturally provided the case law is stable. This might be achieved not so easily, see the byzantine EPS court structure. Namely, it includes a Court of First instance with Central (Paris with Munich), Regional (Nordic Baltic) and Local Divisions (Vienna, Brussels, Copenhagen, Helsinki, Paris, Duesseldorf, Hamburg, Mannheim, Munich, Milan, The Hague, Lisbon, Ljubljana), a Court of Appeal (Luxembourg) and a Patent Mediation and Arbitration Center (Lisbon, Ljubljana), a place to foster amicable settlements, while the CJ EU is placed above to address preliminary rulings on questions about EU law.⁴⁶

Further, the all-or-nothing setting with one legal title means that one successful attack in one jurisdiction can be fatale for the entire patent, ie can lead to the instantaneous end of the patent protection in all jurisdictions.

Regarding conceptual foundations, it is questionable whether the move away from the principle of territoriality, so well established in the IP arena, is the right thing to boost innovations and competitiveness. As the example of EU Trademarks shows, a unitary territory doesn't have to be under all circumstances the same. While for

⁴⁶ Unified Patent Court, 'UPC Structure' https://www.unified-patent-court.org/en/court/presentation accessed 31 July 2023.

trademarks the perception of territoriality can be influenced by the question of distinctiveness for different types of marks, can the same concept of unitary territory be applied to patents?

The EU and many experts voice an extremely positive tenor about the features of the UPS and its potential to boost innovativeness and competitiveness. Arguably, the UPS should decrease the administrative burden along with expensive translation requirements⁴⁷ and increase the efficiency of enforcement, decreases its costs⁴⁸ and makes the market more attractive for abusers, such as patent trolls, and/or large players pushing out small and medium sized enterprises (SMEs).⁴⁹ This should make inventions more valuable and better protected against copying and other abuses,⁵⁰ such as patent trolls, and/or large players pushing out SMEs.⁵¹

However, more sceptic statements and opinions about the UPS, such as the lack of saving and language disadvantage, should not be overlooked. Sadly, the discussion about the UPS does not include critically important CSR and CSV considerations, such as the need for respect, for avoiding waste⁵² and for loyalty⁵³ as well as the call for honesty, transparency and end of greenwashing.⁵⁴

⁴⁷ European Commission, 'The Benefits of Unitary Patent Protection for Europe' https://single-market-economy.ec.europa.eu/industry/strategy/intellectual-property/patent-protection-eu/unitary-patent-system_en accessed 31 July 2023.

⁴⁸ Keli Larson, 'Enforcement: Legal Implications of the European and Unitary Patent Systems for Non-Practicing Entity Patent Enforcement' in Rosa Maria Ballardini, Marcus Norrgård and Niklas Bruun (eds), *Transitions in European Patent Law: Influences of the Unitary Patent Package* (Wolters Kluwer 2015) 149-150, 157-161.

⁴⁹ Hall (n 6).

⁵⁰ European Commission (n 47).

⁵¹ Hall (n 6).

⁵² Radka MacGregor Pelikánová and Filip Rubáček, 'Taxonomy for Transparency in Non-Financial Statements – Clear Duty With Unclear Sanction' (2022) 13 Danube 3, 173 https://doi.org/10.2478/danb-2022-0011 accessed 31 July 2023.

⁵³ Martin Hála, Eva Daniela Cvik and Radka MacGregor Pelikánová, 'Logistic Regression of Czech Luxury Fashion Purchasing Habits During the Covid-19 Pandemic – Old for Loyalty and Young for Sustainability?' (2022) 22 Folia Oeconomica Stetinensia 1, 85 < https://doi.org/10.2478/foli-2022-0005> accessed 31 July 2023.

⁵⁴ Adam Balcerzak and others, 'The EU Regulation of Sustainable Investment: The End of Sustainability Trade-Offs?' (2023) 11 Entrepreneurial Business and Economics Review 1, 199 https://doi.org/10.15678/EBER.2023.110111 accessed 31 July 2023.

Regarding the enforcement via the UPS, it needs to be remembered that this was originally objected even by the CJ EU, see the above mentioned Opinion 1/09 of the CJ EU about the incompatibility of the UPS with the EU.55 The UPS resulting court structure looks byzantine and the establishment of a fair and consistent case law might be extremely difficult. At the same time, the cost of potential litigation are so far unclear,56 but for sure the resulting decisions can have a direct impact for several jurisdictions. The UPS facilitates easy attacks with verdicts applicable to 17 or more jurisdictions, since any unitary single 'jurisdiction-territory' of the EU doesn't exist (in respect to Brussels I Regulation). This all-or-nothing nature can be scary to companies because, with the usual European patent, one would not lose all at once if anything goes wrong.⁵⁷

Conceptually, even if accepting the UPS is a robust patent system leading to an increase in patenting and in the use of patents as a tool of a firm strategy, this does not mean automatically that innovation and competitiveness will be improved.⁵⁸ After all, granting and maintaining a patent is a result of a Faustian bargain⁵⁹ between the inventor and the society crystalized in a fine and fragile balance between the absolute monopoly and unimpeded innovative activities, potentially leading to a better and more just EU as the most competitive economy in the word.

Regarding the alleged improvement of the balance and the legitimacy of the IP

⁵⁵ Accord sur la création d'un système unifié de règlement des litiges en matière de brevets [2011] 123 Opinion the Court (Full Court) 1/09 ('[P]ursuant to Article 218(11) TFEU and Article 300(6) EC of 8 March 2011 regarding the Creation of a unified patent litigation system – Consequently, the envisaged agreement, by conferring on an international court which is outside the institutional and judicial framework of the European Union an exclusive jurisdiction to hear a significant number of actions brought by individuals in the field of the Community patent and to interpret and apply European Union law in that field, would deprive courts of Member States of their powers in relation to the interpretation and application of European Union law and the Court of its powers to reply, by preliminary ruling, to questions referred by those courts and, consequently, would alter the essential character of the powers which the Treaties confer on the institutions of the European Union and on the Member States and which are indispensable to the preservation of the very nature of European Union law. Consequently, the Court (Full Court) gives the following Opinion: The envisaged agreement creating a unified patent litigation system (currently called "European and Community Patents Court") is not compatible with the provisions of the EU Treaty and the FEU Treaty').

⁵⁶ Appio and others (n 26).

⁵⁷ IamIP, 'Unitary Patent and UPC System: Advantages and Challenges' https://iamip.com/unitary-patent-and-upc-system-advantages-and-challenges/ accessed 31 July 2023.

⁵⁸ Hall (n 6).

⁵⁹ Aribugi and Filippeti (n 17).

protection in the EU, we are entering into the complex arena of the ephemeral concept of justice and fairness and the consequential, deontological, social contract and other concerns and justifications.⁶⁰ The UPS with 17 'full' members, 7 'potential' members and 3 'hopefully sometimes' members (Croatia, Poland, Spain) represents another example of an asymmetric model with elements of symmetry⁶¹ and of search for common shared values and priorities, such as the concept of 'fair-size and fair-cost patent and patent litigation'.⁶² There are always winners and losers, so the question is rather who will be the beneficiary of the UPS and the attention should be paid to the fact that the patent protection for European jurisdictions is massively applied for by non-Europeans subjects, such as US and Chinese companies,⁶³ and that many companies are using patents and attacks to patents as ruthless strategic weapons while destroying the creativity, innovativeness and even well recognized EU values.⁶⁴

7. Pioneering observations about the UPS application

It needs to be recognized that EPO managed well the transition and the EPS was truly launched on 1st July 2023 and runs rather smoothly. Further, it needs to be appreciated that so far no serious complaints emerge and the use of EPS looks rather promising. So prima facie, 'so far so good'. However, a closer look in numbers confirms several problems which have already been mentioned during the pathway towards the UPS.

⁶⁰ Petra Žárská and Matúš Mesarčík, 'Dualistic Data Property Right: Solution for Controllership of Data in the European Union?' (2021) 21 International and Comparative Law Review 2, 43 https://doi.org/10.2478/iclr-2021-0013 accessed 31 July 2023.

⁶¹ Hana Kováčiková, 'Integration Model of the European Economic Area: Symmetric or Asymmetric?' (2021) 21 International and Comparative Law Review 2, 230-246 https://doi.org/10.2478/iclr-2021-0020 accessed 31 July 2023.

⁶² Appio and others (n 26).

⁶³ Lisa Van Dongen, 'The UPC Agreement and Liability Rules. The Entitlement and Enforcement' (2018) https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=2700946 accessed 31 July 2023.

⁶⁴ Radka MacGregor Pelikánová, Robert K MacGregor and Martin Černek, 'New Trends in Codes of Ethics: Czech Business Ethics Preferences by the Dawn of COVID-19' (2021) 12 Oeconomia Copernicana 4, 973 https://doi.org/10.24136/oc.2021.032 accessed 31 July 2023.

On 24th July 2023, the EPO published a Dashboard summarizing the interest in the EPS, ie demands for unitary patents,⁶⁵ and offering very interesting numbers.⁶⁶ In total 4,215 were registered, 620 are pending and 5 were withdrawn. Regarding fields and industry, the majority of requests for unitary patents are from Infrastructure and Mechanics (999, ie 20.6%), Health (969, ie 20%), Materials & Production (922, ie 19%) and Digital (492, ie 10.2%), while Energy is behind (324, ie 6.7%). Even more interestingly, the selected procedural language is basically either English (3,395, ie 70.1%) or German (1,116, ie 23.1%), while French is way behind (329, ie 6.8%), ie the official trio is de facto turned into duo. The reason why can be extracted from the statistic about the most common translation language, which is obviously English (1,423, ie 29.4%) and German (1,009, ie 20.8%), followed surprisingly by Spanish (1,306, ie 27 %) and then French (231, ie 4.8%) and Italian (228, ie 4.7%). This suggests that francophone advancement in the field of IP, especially EPS, should be perhaps revisited. Indeed, the initial linguistic opposition of Spain and Italy regarding EPS is at least understandable, and perhaps even justified.

Moving away from internal EU linguistic issues, another even more worrisome aspect of the UPS emerges, namely the origin of applicants – the US, Germany and China, followed by France, the United Kingdom, Sweden, Spain and Italy. The EPS is basically a good patent system, but whether its prime beneficiaries are Europeans and whether it boost the innovations and competitiveness of the EU facing the global powers are burning questions...

8. Conclusions

A modern European integration based on the sustainability, shared values and competitiveness is not feasible without innovations. Their source, inventions, must be

⁶⁵ European Patent Organization, 'New Dashboard Reveals Demand for Unitary Patents' (24 July 2023) https://www.epo.org/news-events/news/2023/20230724.html accessed 31 July 2023.

⁶⁶ European Patent Organization, 'Requests for Unitary Effect' (24 July 2023) https://www.epo.org/news-events/news/2023/20230724/unitary-patent-dashboard.png accessed 31 July 2023.

covered by an effective and efficient legal system. For three decades, the EU has been trying to establish a unified patent system. Since a plan A via a conventional legislative venue has failed, the EU moved to a plan B based on current EPO mechanism and on the new EU enhanced co-operation. Resulting three pillars legal structure of the UPS was launched and allows to opt-out from the regular EPO multi-jurisdiction validation processes and instead to get a unitary patent for 17 EU member states.

The unified linguistic, fee, administration and enforcement mechanism of the UPS brings both opportunities and challenges. The EU has high expectations and believes that its easier, cheaper, more fair and ultimately very pro-innovative and procompetitive. However, the management, linguistic and cost efficiency does not apply to all and the effectiveness of the all-or-nothing approach, especially regarding the enforcement by the byzantine EPC system, is questionable.

In sum, the UPS offers the option after the granting of the European patent – instead of a bundle of national patents with different regimes, office locations and payment schedules, it is possible to enjoy a one-stop-shop solution which benefits by the protection in 17 jurisdictions and which is to be decided by a myriad of courts and panels under the auspices of the EPC system regarding all these 17 jurisdictions. Expense calculation and comparative tables regarding languages and times are done, the enforcement mechanism is visualized and many comments about it are presented. However, the most important might be overlooked - why for some many years and after such a conviction campaigns certain jurisdictions and influential groups of stakeholders still do not want the UPS... at any price! The Faustian bargain regarding the legal protection of inventions by patents might be more complexed in the context of a modern European integration then so far admitted. Perhaps the EU, especially its leaders, should focus more on reasons why UPS was or is less popular in certain jurisdictions and be more open minded to consider a depart from certain outdated assumptions, such as language regimes or choice of beneficiaries, and to stick more closely with common shared values, such as respect or fight against waste. The pathway to an effective and efficient patent protection in the EU is definitely turbulent and for sure not completed.