that were largely financed by public resources. This right shall take effect within a reasonable period of time after initial publication. 83 If scientists hold the right to second publication, they should be obliged in the case of publicly funded projects to publish their research findings online and free of charge upon expiry of the term. 84

A 3 THE EU PATENT SYSTEM

Current situation

On 11 December 2012, the European Parliament agreed on the introduction of unitary EU patent protection. 85 The EU member states have thus taken a considerable step towards reaching their objective of overcoming the fragmentation of the EU patent system. The Expert Commission takes this opportunity to once again comment 6 on the status quo and to point to important legal and economic issues relating to the EU patent system.

The EU already provides for a European bundle patent, which dates from the European Patent Convention (EPC) of 1972. This bundle patent exists alongside national patents, which are granted by the individual EU member states' patent offices in accordance with national legislation. Since 1978, the European Patent Office (EPO), established in 1978 with headquarters in Munich, has been in charge of the examination and granting of European patents. However, upon granting, the European patent then disintegrates into several individual national protective rights, which are subject to evaluation in the respective target countries. Patent infringement claims and revocation actions relating to patents granted by the EPO are then brought before the national courts and negotiated under applicable national patent law.

Despite the existence of the EPO, there is still no patent that is valid in all EU member states and that can be enforced or contested in court according to uniform legal criteria. The fragmentation of the European patent system is impeding the harmonisation of the internal market. Despite the absence of translation requirements in most EPC states, the European patent system still results in high costs for patent application and enforcement on a country-by-

country basis.⁸⁷ These costs represent a considerable hurdle for small and medium-sized enterprises in particular. What is more, the assigning of patent legislation to national courts may result in several court proceedings and, in some cases, may also result in conflicting court orders relating to one and the same patent in different member states.

The majority of patent disputes within the EU are negotiated in Germany.⁸⁸ Hence Germany's patent jurisdiction has been able to build up relevant competences over the last decades. From the perspective of conflicting parties, Germany's patent jurisdiction is also characterised by significant comparative advantages. These include (i) the swift resolution of cases, (ii) relatively low costs of litigation, which allow even SMEs to participate in litigation, (iii) a high level of technical competence among judges, which is reflected in the "technical quality" of decisions, (iv) the concentration on a few highly specialised courts, (v) the parsimonious use of external expert opinions, which are usually cost-intensive.⁸⁹

The status quo

The package for the creation of a unitary EU patent protection comprises two proposed regulations.90 The first regulation is concerned with the enhanced cooperation of 25 EU member states to create a European patent with unitary effect, which shall provide the sovereign territories of the participating countries with unitary protection. The examination and granting shall be effected by the European Patent Office, as is the case with bundle patents, which will continue to exist. The second regulation specifies requirements for the translation of patent documents. According to this regulation, future patent applications may be filed in English, French or German.⁹¹ Italy and Spain did not approve of the proposed language regime and are thus not participating in the enhanced cooperation.

The EU patent package further includes an interstate agreement between all EU member states participating in the enhanced cooperation for the creation of a European Patent Court, also referred to as the Unified Patent Court. 92 In future, this court shall be the exclusive jurisdiction for any dispute regarding the validity or infringement of a European patent with unitary effect. It will also be responsible

for handling disputes over European bundle patents. A Court of Appeal based in Luxembourg will serve as the Supreme Court. The Court of First Instance shall comprise a Central Division, as well as several local and regional divisions.93 In June 2012, the European Council agreed on Paris as the seat of the Central Division. A section of the central division will also be established in Munich. This is where future patent disputes in the field of engineering will be negotiated – an area from which the highest proportion of German patent applications are recorded. A section based in London will be responsible for patent disputes in the field of chemistry, including pharmaceuticals and biotechnology. Up to four local divisions in Germany are planned to be established. The decision on the actual location of the divisions in Germany has not yet been made.

The Central Division is, inter alia, responsible for actions for revocation and compulsory licences. The Central Division is also in charge of negotiating infringement claims, provided that the defendant is domiciled outside the EU. Hearings in the central division are held in the language in which the patent was granted.94 The local and regional divisions are not only in charge of infringement actions, injunctions and actions for damages or compensation, but also for actions for revocation. The local and regional divisions of the new court system have the discretion to negotiate infringement and revocation procedures in joint or separate proceedings. This means that the divisions can decide on the counterclaim for revocation when they request to allocate a technically qualified judge. Alternatively, the local and regional divisions can separate the revocation action from the infringement action by referring the former to the Central Division. In sole discretion, they can either immediately decide on the infringement action, or stay the proceedings until the central division has decided on the patent's validity.95 The dispute may also be entirely referred to the Central Division, provided that the parties agree.

Until the European patent with unitary effect can be adopted in full, there are still major hurdles to overcome at European and national levels. For instance, the fees stipulated in the regulations will have to be determined with regard to patent application, examination and maintenance. This will be decided by a Select Committee, which comprises member state representatives. The Committee is expected to be established in spring 2013. In addition to determining applicable fees, the Committee will also determine the distribution key for participating member states. Moreover, the Agreement on the Unified Patent Court needs to be ratified by at least 13 contracting states – including Germany, the UK and France, as these are the countries with the highest number of valid European patents. As regards Germany, it is very likely that the Agreement will not be ratified until late 2013, when the new legislative period commences. It remains to be seen if and when the Agreement will be ratified by all 13 member states. Ultimately, the issuing of a European patent with unitary effect can begin once the unified patent litigation system has been fully established. This process is due to be completed in 2015.

Meanwhile, Spain and Italy have brought actions before the European Court of Justice (ECJ) against the enhanced cooperation in the area of the unitary patent. While the European Court's final decision is still pending, the relevant Advocate General advised the ECJ in December 2012 to dismiss the actions brought by Spain and Italy. It is expected that the ECJ will follow this recommendation. Once regulations have entered into force, it is expected that Spain will be bringing another action with regard to the regulations' compatibility with European law.

Assessment

Against the background of decades of negotiations, the newly adopted patent package has been regarded as a breakthrough by many observers. For the creation of a single European market, the package indeed represents a significant improvement on the European bundle patent that is currently in place. Irrespective of the fees that are yet to be determined, it is expected that the elimination of patent fees in the individual countries will result in significant cost decreases for the EU-wide protection of patents. European SMEs in particular are expected to benefit from this. Yet it is also feared that the number of applications for low-quality patents will increase due to lower costs.

The unitary system will also result in considerable decreases in court fees for all companies involved in patent litigation cases.⁹⁷ The reason for this is that now only one procedure will be required for the

Europe-wide enforcement of rights emerging from a patent, which has not been the case in the past. For German enterprises, the launch of local patent divisions allows for immediate access to the European patent litigation system at reasonable costs. Language barriers, which often prevented SMEs and other companies from exercising their patent claims in other member states, have now been eliminated. For the European patent with unitary effect, conflicting decisions of national courts regarding one and the same patent will be a thing of the past, since decisions by the unified patent court apply to the entire territory of the participating member states.

Yet the agreed EU patent package is still in need of improvement. The unification of the European patent system has yet not been fully achieved, since the European patent with unitary effect is an optional supplement to national patent law and the existing European bundle patent. In future, companies can choose between four partially overlapping types of patent protection: (i) nationally granted patents, (ii) national patents emerging from a European bundle patent and subject to the regulations of the Unified Patent Court, (iii) national patents emerging from a European bundle patent and not subject to the regulations of the Unified Patent Court,98 and (iv) European patents with unitary effect.99 The introduction of the European patent with unitary effect thus significantly increases the complexity of the European patent system.

Once the Unified Patent Court has been established, a number of new institutions will be involved in European patent law, which will make it even more difficult to establish a unitary EU-wide jurisdiction. In the medium term, this will reduce legal certainty for patent-active companies. Thus, alongside the newly established Unified Patent Court, the European Court of Justice will also be involved in jurisdiction through preliminary references. In all those countries that have not ratified the Agreement on the Unified Patent Court, or those that are not participating in enhanced cooperation, the national courts will continue to decide on patent disputes. The European Patent Office's Boards of Appeal, as well as national courts and national administrative bodies, continue to hold jurisdiction in administrative appeals and procedural matters. 100 Thus the new regulations and institutions can only be regarded as a temporary solution.

Questions should also be raised with regard to the provisions for the submission and referral of actions to the Central Division in Paris. First, it might well be the case that defendants who seek to permanently avoid the jurisdiction of a particular local division will transfer their registered office to a non-EU country. This would enable them to systematically bypass the local divisions, as they would be directly transferred to the central division, thereby benefitting from the anticipated procedural delays. Second, it is feared that alleged infringers who have been charged could make frequent use of the option of requesting a referral to the Central Division. Again, this would be to the detriment of general legal certainty and at the expense of patent holders. In order to minimise these risks, companies could decide to make more use of national application procedures - and the accompanying national courts so as to protect their patents.

By providing the option of joint or separate proceedings for infringement and revocation actions, the Agreement on the Unified Patent Court combines aspects of the "separation principle" from German and Austrian patent law with the linked system used in many other EU member states. Thus the advantages and disadvantages of both systems are reflected in the rules and regulations of the new European patent scheme. On the one hand, the separation of proceedings - which is explained with the different competences of the individual court locations - could result in courts issuing injunctions for potential infringements while a counterclaim for revocation in infringement proceedings relating to the respective patent is still being pleaded at another court. On the other hand, defendants could strategically use the suspension of infringement proceedings to benefit from delays in court procedures. The combination of both systems can be regarded as a compromise solution that is yet untested. This means that the new system will entail additional uncertainty for all parties involved.

It is feared that the establishment of the Unified Patent Court's Central Division in Paris, and the tendency of other EU member states to refrain from establishing local or regional divisions but instead strengthening the Central Division, will decrease the relevance of the German patent litigation courts in favour of the Central Division. This also means that the skills developed over years in Germany, and the

aforementioned advantages of the German system, might get lost within the framework of a European jurisdiction. Furthermore, capacity building in the new institutions will be time-consuming and require extensive resources. Although the decision to negotiate disputes relating to mechanical engineering at the Court of Munich means that existing experience is drawn on, Germany will still lose out on the opportunity to build and develop competences in other areas of high technology – such as chemistry, biotechnology and information technology – because in future, the relevant patents will be increasingly negotiated elsewhere.

Recommendations

The Expert Commission welcomes the creation of a European patent with unitary effect and the creation of a single patent jurisdiction as a logical consequence of the common European market. It is expected that SMEs in particular will benefit from the new provisions. One of the key factors for the future acceptance and hence the success of the unitary European patent will be the design of the patent fee system. Fees should be attractive enough for the new system to be preferred to the old system of bundle patents, while at the same time remaining at a level that would effectively limit incentives for increased numbers of low-quality patent applications.

In the event that reduced fees will lead to an increased number of patents filed, the European Patent Office will become even more important as the examining institution that serves to secure patent quality. The current high standards shall be guaranteed also in the future by providing the EPO with suitable infrastructure and administrative support. In addition, the EPO should regularly report on quality control and other measures and publish the results of the regular quality checks that are already being conducted at this stage. Given the large number of applications for low-quality patents, the most important task of the EPO will be to identify and reject such applications.¹⁰¹

Due to the system's strong focus on the Central Division, it is foreseeable that many patent disputes that in the past would have (also) been dealt with by German courts, will in future be negotiated outside of Germany and heard by the Central Division. It

is therefore essential to ensure that only the highest standards are applied to the selection and specialised training of judges and in the ongoing administrative support of the court. Moreover, Germany's technical expertise, acquired over the course of a century, and the advantages of the German system need to be integrated into the new system. The future development of the European patent system must be accompanied by the systematic development of vocational training, further training and research in the field of patent protection. Training and research should be conducted on an interdisciplinary basis and should be designed according to pan-European standards instead of current national standards.

Ultimately, one should by no means expect the new system to lead to a breakthrough. Instead, it is essential to continuously work on the harmonisation of the EU patent system. Therefore the Expert Commission recommends fully replacing the EPO bundle patent in all of the territories of the EU member states with the European patent with unitary effect. The acceptance of the new patent will determine whether national patent protection can play a significant role within the new system in the long term.

INTERNET AND IT START-UPS IN BERLIN

The media are currently depicting Berlin as the internet capital of Europe.¹⁰² And indeed it is the case that in recent years Berlin has seen an increasing number of internet and IT start-up businesses financed through venture capital.

Yet it is not necessarily easy to find consistent facts and figures to support the image of Berlin as Europe's internet capital, as suggested by the media. Depending on the delimitation of industries and depending on the definition of the concept of entrepreneurship, some statistics place Munich at the top of the start-up rankings, while others place Berlin at the top. 103 What distinguishes the Berlin start-up scene from the start-up scenes of other German metropolitan regions can only partially be explained by the number of new enterprises; it is the structure and the specific features of Berlin's start-up scene that sets the city apart from Munich. Thus, for instance, Berlin's start-up scene is strongly focussed

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