



The Future Patent System of the European Union

ALLEA Standing Committee on Intellectual Property Rights

connecting excellence

ALLEA | ALL European Academies

The European Federation of National Academies of Sciences and Humanities



ALLEA Statement on the Future Patent System of the European Union

This statement argues that the current European patent system does not satisfy the IPR needs of scientific research and falls short of the bold vision of the European Innovation Union. The statement supports the creation of a unitary European Union patent, as a supplement to existing European and national patents, of a single European patent judiciary, and of a centralized European appeal court. In the absence of an unanimous position amongst Member States, however, the statement welcomes the alternative solution requested by 25 EU member states within the framework of enhanced cooperation, which will result in a European patent having unitary effect in all Member States except Italy and Spain.

In addition, the statement draws attention in particular to the need to find a harmonized approach to regulations regarding employees' inventions, especially those involving academic research in public institutions.

It also encourages the European Commission to re-launch efforts aimed at ensuring that European law provides for a grace period similar to the one existing in US law.

I. Background

Patents protect the results of innovation in the technical sciences and secure investments in research and development. The importance of patent protection in the academic sector has increased in accordance with the growing recognition that research institutions are not only producers of pure knowledge, but also important contributors to the general innovation process and, by extension, to the welfare of society.

Discoveries and inventions are contributions to the universal body of knowledge. They are truly international in character. Innovation processes, on the other hand, that result from such discoveries and inventions depend on specific local and regional framework conditions. International cooperation in the area of patent protection are of utmost importance.

In Europe, the European Patent Convention of 1973 was a major step forward, but scoreboard analyses show that in the field of patenting high translation and litigation costs continue to place European actors at significant disadvantage compared to US and Asian competitors. Hence, it has long been a prioritized task for European authorities to improve the patent system in Europe.

With the recent policy emphasis on the European Innovation Union, the scientific communities are called upon to support moves towards rendering more rational and more effective the EU patent system under which they operate. The Common Strategic Framework initiative indicates delivery of a proper IPR environment as one key step towards the Vision Europe 2020¹.

Conversely, failure of legislators to take the necessary measures risks further obstructing the development of a properly regulated market for innovative knowledge in Europe. An appropriate framework for IPR and patenting in Europe would include also provisions that ensure that no obstructions to further research or to equitable availability of products are created.

¹ The ALLEA Standing Committee on Intellectual Property Rights is also preparing a set of recommendations for the further development of the EC's Common Strategic Framework for Research and Innovation entitled "Elements for a new framework for intellectual property rights for European research and innovation".

II. Issues obstructing a European patent system: judicature and language regime

Fifty years after establishing the first working group for the creation of a European Community patent, and 35 years after the conclusion of the Community Patent Convention in Luxembourg (which never entered into force), the EU Commission and the Council are again attempting to create a unitary patent system.²

Two major issues are still waiting to be resolved, firstly, the structure and composition of the patent judicial system and, secondly, the translation arrangements for European Union patents.

The Council presented a draft Agreement creating a European Patent Judiciary in March 2009.³ On 6 July 2009 the Council requested the opinion of the Court of the European Union on the compatibility of the proposed dispute settlement system with the Treaty on the Functioning of the European Union. According to the opinion of the Court, delivered on 8 March 2011, the draft Agreement is not compatible with the provisions of the EU Treaty and the FEU Treaty.⁴ Having turned the proposal down, the prospect of unitary patent judiciary is presently uncertain.

Furthermore, the Commission proposed a Regulation on translation arrangements in June 2010.⁵ The proposal failed, however, to gain the required unanimous support from Member states, even after extensive efforts and a number of compromise proposals. Recognizing that unanimity could not be reached, 12 Member States required in November 2010 the Commission to present a proposal within the framework of enhanced cooperation according to Article 20 of the Treaty of the European Union.⁶ The request was subsequently followed by another 13 Member States, which means that all 27 Member States except Italy and Spain are now pursuing this option. The Council authorised the request for enhanced cooperation on 10 March 2011⁷.

Subsequently, the Commission issued on 13 April 2011 its revised Proposal for translation arrangements and implementing provisions.⁸ According to this proposal, the EU patent specification published by the EPO in one of the three official languages of the EPC, with translation of the claims into the other two official languages, are to be the authentic text and no further translation will be required. Only in case of a dispute relating to an EU patent shall the patentee provide at the request and the choice of an alleged infringer a full translation of the patent into an official language of the Member State in which either the alleged infringement took place or in which the alleged infringer is domiciled.

² Council of the European Union, Proposal for a Council Regulation of the European Union Patent of 27 November 2009 (Doc 16113/09 – ADD 1 – CNS 2000/0177).

³ Council of the European Union, Draft Agreement on the European and Community Patents Court and Draft Statute of 23 March 2009 (Doc. 7928/09).

⁴ Opinion 1/09.

⁵ Proposal for a Council Regulation (EU) on the translation arrangements for the European Union patent of 30 June 2010 (COM (2010) 350 final, 2010/0198 (CNS)).

⁶ Request from Denmark, Estonia, Finland, France, Germany, Lithuania, Luxembourg, the Netherlands, Poland, Slovenia, Sweden and the United Kingdom.

⁷ Council Decision 2011/167/EU of 10 March 2011 authorising enhanced cooperation in the area of the creation of unitary patent protection (OJ L 76, 22.3.2011, p. 53).

⁸ Proposal for a Council Regulation implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements of 13 April 2011 (COM(2011) 216/3) and Proposal for a Regulation of the European Parliament and of the Council implementing enhanced cooperation in the area of the creation of unitary patent protection of 13 April 2011 (COM(2011) 215/3).

ALLEA's view:

1. The **creation of a European patent with unitary effect**, as an alternative to existing European and national patents, is long overdue. The possibility of creating a **single European patent judicature** should be explored further. A solution compatible with EU law should be elaborated as soon as possible.

While acknowledging the valuable efforts of the European Patent Office, there is no doubt that the lack of a single European patent judicature has led to considerable uncertainty and divergent application of patent law at national level.

For instance, European patents granted by the European Patent Office repeatedly experience differing interpretation in designated States, i.e. the same European patent is, e.g. often revoked in Germany and in the United Kingdom, but upheld in France and Spain, etc. In the US a centralized appeal instance – The Court of Appeals for the Federal Circuit – was established in 1982 to overcome problems similar to those experienced in Europe today, and has been, according to the general opinion, a success.

Some background facts⁹

Translation costs: a European patent validated in 13 countries can cost as much as €20,000, of which costs nearly €14,000 arise from translation fees alone, and in which attorneys fees are not yet taken into account. This risks making a European patent far more than 10 times more expensive than a US patent, costing about €1,850.

It may be noted, however, that also under current rules translations are not required during prosecution of applications, which may last for a considerable period of time, without this seeming to cause competitors of the applicant noticeable distress. Since the entering into force of the European Patent Convention in 1977, European patent applications after their publication and up to the patent grant have been available only in either English (some 85%), German (some 10%) or French (some 5%).

Litigation costs: they can vary significantly according to the type of proceedings, complexity of the case, technical field etc. Parallel litigation in four countries would typically vary between €300,000 and €2 Mio. at first instance alone.

Furthermore, the *considerable costs* stemming from current translation requirements and the need for multiple litigation procedures entail significant disadvantages for European innovators compared to their US and Asian counterparts. These costs are to a large extent unproductive and superfluous. Academic institutions and their researchers/inventors are particularly affected by the present high costs and risks; this often contributes to making them refrain from entering the patenting process altogether. The same is true for their partners from industry, if they belong to the category of SMEs, or as venture capitalists.

ALLEA's view:

2. ALLEA welcomes the initiatives by the European Commission and the Council aimed at significantly **reducing the costs** of obtaining patent protection in Europe. This may induce academic institutions and their researchers/inventors to make more and better use of the tools available under the existing and evolving IPR frameworks.
3. The **language regime** proposed by the Commission, which aims at significantly reduced costs for translation, is vital for the success of the unitary patent system.

⁹ Figures taken from Communication from the Commission to the European Parliament and the Council: Enhancing the patent system in Europe, COM(2007) 165 final.

4. The creation of a **European patent judiciary** having jurisdiction both in relation to unitary and European patents is essential in order to avoid costly multiple litigation procedures.
5. A **centralized European appeal court** (but not necessarily a centralized first instance court) is of utmost importance for the coherent and dynamic development of European substantive patent law. A centralized court may be expected to clarify the interpretation of provisions that are of central importance also for academic research, such as for instance the experimental use exception, allowing for experiments to be undertaken on patented inventions

Even though the preferred solution would obviously be a patent system comprising all Member States, taking into account that such a system seems to be unfeasible in the foreseeable future, the current proposal for a solution within the framework of enhanced cooperation, comprising for the time being 25 Member States, deserves support.

ALLEA's view:

6. The current proposal for a solution within the framework of **enhanced cooperation**, comprising for the time being **25 Member States**, is clearly a step in the right direction.

III. Practical steps and urgent measures to strengthen the European Research Area

The current proposal gives occasion to the following general observations by ALLEA, which reflect the basic needs of the European academic community to be able to use the patent system productively for successful transfer of discoveries and inventions into innovative products and processes.

ALLEA draws, however, attention to the fact that even the most recent Proposal for a Council Regulation of the European patent does not provide for a harmonized/unitary **regulation of employees' inventions**.

ALLEA is fully aware of the past failed attempts of the EU Commission to address this issue. But such past failures should not prevent a new attempt for harmonizing at least such basic aspects of employees' invention law as definitions of the different categories of service inventions, the rights of employers and employees to such inventions, or, for instance, who and under what conditions is entitled to apply for a patent. Currently, laws regulating employees' inventions among EU Member States, such as Belgium, Germany, France, Italy, the Netherlands, Sweden and the United Kingdom, can be said to differ to the largest possible extent.

In view of the steps taken towards a unitary EU patent this situation should be remedied as soon as possible.

ALLEA's view:

7. ALLEA encourages renewed efforts to arrive at a meaningful, **harmonized regulation of employees' inventions** that will facilitate implementation of the future unitary EU patenting rules.

Further important improvements are still needed in order to make the patent system better suited for the needs of the academic sector as well as for the needs of small and medium sized enterprises (SMEs).

A comparison of current European law with US legislation and case law in the field of patents makes abundantly clear, in what direction the legal framework for the exploitation of academic inventions could be developed. The *Bayh-Dole Act*, entered into force as early as 1980, explicitly allows universities and other research institutions to retain intellectual property rights based on publicly funded research. This and other legislative initiatives aimed at the protection and dissemination of research results have made US academic institutions important participants in the innovation process. Comparatively little has been done in Europe to attain the same goal, except from fragmented initiatives at national level.

To strengthen the role of universities and research institutions in the European innovation process is of critical for the development of a knowledge-based economy within a united Europe.

ALLEA's view:

8. ALLEA encourages the European Commission to re-launch efforts aimed at ensuring that European law provides for a **grace period** similar to the one existing in US law, but preceding the Union priority date.

The introduction of a grace period under European law would reduce the risk of accidentally depriving scientists and their institutions of the chance to acquire patent protection. At the same time, it would facilitate early publication and dissemination of research results. Moreover, the introduction of a grace period into European law might prompt the U.S. legislators to proceed with the pending U.S. patent law reform: if adopted, it will replace the "first-to-invent" system with a "first-inventor-to-file" system.

The **rights and obligations of researchers, institutions and industry partners** vary between the Member States, and are to some extent insufficiently clarified.

It should be investigated whether harmonization is possible and needed with respect to, in particular, the right to apply for patents and the entitlement to remuneration for inventions that are assigned from researchers to institutions or industry partners. ALLEA and its Member Academies, with their partner organizations in science, industry and politics, could offer to further explore this issue.

European law does not provide a **statutory framework** enabling universities and other publicly funded research institutions to effectively exploit and protect their research results.

The ALLEA Standing Committee on Intellectual Property Rights in cooperation with its Member Academies, related scientific organisations and European institutions should explore the need for a harmonized framework and the possible structure and content of such a framework, in particular with respect to results that emerge from public-private partnerships. .

Competent organs of the European Union and those of the Members States should also invest further efforts for improving the ability of non-industrial research institutions and cooperating SMEs to better use the patent system nationally, regionally and internationally to the benefit of their international competitiveness.

ALLEA Standing Committee on Intellectual Property Rights

Professor Joseph Straus - Union of the German Academies of Sciences and Humanities (Chair)

Professor William Cornish - British Academy

Professor Carine Doutrelepon - Royal Academy of Sciences, Letters and Fine Arts, Belgium

Professor Sir Roger Elliott - Royal Society, United Kingdom (immediate past chair)

Professor Stanislaw Soltysinski - Polish Academy of Arts and Sciences

Professor Are Stenvik - Norwegian Academy of Arts and Sciences

Professor Ünal Tekinalp - Turkish Academy of Sciences

Professor Tomasz Twardowski - Polish Academy of Sciences

Professor Feer Verkade - Royal Netherlands Academy of Arts and Sciences

Professor Sylvester Vizi - Hungarian Academy of Sciences

Professor Alain Strowel, Brussels (external expert)

Dr Rüdiger Klein (ex officio, ALLEA)

ALL European Academies (ALLEA)

ALLEA is the Federation of 53 National Academies of Sciences and Humanities in 40 European countries. Member Academies are self-governing communities of leaders of scientific and scholarly enquiry across all fields of the sciences, the social sciences and the humanities. ALLEA therefore provides access to an unparalleled human resource of intellectual excellence, experience and expertise.

Member Academies operate as learned societies, think-tanks, grant givers, and research performing organisations.

ALLEA promotes the exchange of information and experiences between its members, offers European science and society advice from its Member Academies through its expert advisory bodies; and strives for excellence in science and scholarship and for high ethical standards in the conduct of research.

Independent from political, commercial and ideological interests, ALLEA's policy work seeks to contribute to improving the framework conditions under which science and scholarship can flourish both in Europe and beyond. Jointly with its Member Academies, ALLEA is able to address the full range of structural and policy issues facing nations and Europe as a whole in the fields of higher education, science, research and innovation.

Member Academies

Albania: *Akademia E Shkencave E Shqipërisë*; **Austria:** *Österreichische Akademie der Wissenschaften*; **Belarus:** *Нацыянальная акадэмія навук Беларусі*; **Belgium:** *Académie Royale des Sciences des Lettres et des Beaux-Arts de Belgique*; *Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten*; **Bosnia and Herzegovina:** *Akademija nauka i umjetnosti Bosne i Hercegovine*; **Bulgaria:** *Българска академия на науките*; **Croatia:** *Hrvatska Akademija Znanosti i Umjetnosti*; **Czech Republic:** *Akademie věd České republiky*; **Denmark:** *Kongelige Danske Videnskabernes Selskab*; **Estonia:** *Eesti Teaduste Akadeemia*; **Finland:** *Suomen Tiedeakatemia* *in Valtuuskuntal*; **France:** *Académie des Sciences - Institut de France*; *Académie des Inscriptions et Belles-Lettres*; *Académie des Sciences Morales et Politiques*; *European Academy of Arts, Sciences and Humanities (Associated Academy)*; **Georgia:** *საქართველოს მეცნიერებათა ეროვნული აკადემია*; **Germany:** *Deutsche Akademie der Naturforscher Leopoldina*; *Union der deutschen Akademien der Wissenschaften*; *Akademie der Wissenschaften in Göttingen*, *Akademie der Wissenschaften und der Literatur Mainz*, *Bayerische Akademie der Wissenschaften*, *Berlin-Brandenburgische Akademie der Wissenschaften*, *Akademie der Wissenschaften zu Hamburg*, *Heidelberger Akademie der Wissenschaften*, *Nordrhein-Westfälische Akademie der Wissenschaften und der Künste*, *Sächsische Akademie der Wissenschaften zu Leipzig (Associated Academies)*; **Greece:** *Ακαδημία Αθηνών*; **Hungary:** *Magyar Tudományos Akadémia*; **Iceland:** *Vísindafélag Íslendinga*; **Ireland:** *The Royal Irish Academy - Acadamh Ríoga na hÉireann*; **Israel:** *האקדמיה הלאומית הישראלית למדעים*; **Italy:** *Accademia Nazionale dei Lincei*; **Kosovo:** *Akademia e Shkencave dhe e Arteve e Kosovës*; **Latvia:** *Latvijas Zinātņu akadēmija*; **Lithuania:** *Lietuvos mokslų akademijos*; **Macedonia:** *Македонска Академија на Науките и Уметностите*; **Moldova:** *Academia de Științe a Moldovei*; **Montenegro:** *Crnogorska akademija nauka i umjetnosti*; **Netherlands:** *Koninklijke Nederlandse Akademie van Wetenschappen*; **Norway:** *Det Norske Videnskaps-Akademi*; **Poland:** *Polska Akademia Umiejętności*; *Polska Akademia Nauk*; **Portugal:** *Academia das Ciências de Lisboa*; **Romania:** *Academia Română*; **Russia:** *Российская академия наук*; **Serbia:** *Srpska Akademija Nauka i Umetnosti*; **Slovakia:** *Slovenská Akadémia Vied*; **Slovenia:** *Slovenske akademije znanosti in umetnosti*; **Spain:** *Instituto de España*; *Real Academia de Ciencias Morales y Políticas*; **Sweden:** *Kungl. Skogs- och Lantbruksakademien*, *Kungl. Vetenskapsakademien*; *Kungl. Vitterhets Historie och Antikvitets Akademien*; *Kungl. Ingenjörsvetenskapsakademien*; **Switzerland:** *Akademien der Wissenschaften Schweiz*; **Turkey:** *Türkiye Bilimler Akademisi*; **Ukraine:** *Національна академія наук України*; **United Kingdom:** *The British Academy*; *The Royal Society of Edinburgh*; *The Royal Society of London*; **Vatican:** *Pontificia Academia Scientiarum*

President: Professor Jüri Engelbrecht; **Vice-President:** Professor Nicholas Mann

Executive Director: Dr Rüdiger Klein

Postal address: P.O. Box 19121; 1000 GC Amsterdam; The Netherlands

Visiting address: KNAW; Het Trippenhuis; Kloveniersburgwal 29; NL-1011 JV Amsterdam, The Netherlands

Contact: Phone +31 (0)20-5510754; E-mail: secretariat@allea.org; Website: www.allea.org