

**The European Patent System :
Implementing Patent Law Harmonisation**

Robert Pitkethly

Saïd Business School
Oxford University
59 George Street
Oxford OX1 2BE

Tel: +44-(0)1865-288658

Fax: +44-(0)1865-288651

E-Mail: robert.pitkethly@sbs.ox.ac.uk

A paper originally presented in OHP format at the
International Symposium on Innovation and Patents held at
The Institute of Innovation Research of Hitotsubashi University, Japan
on 12th-13th February 1999.

This final version is available in .pdf format from the website of the Oxford Intellectual Property
Research Centre : <http://www.oiprc.ox.ac.uk/EJWP1099.pdf>

The European Patent System : Implementing Patent Law Harmonisation

Abstract

The origins of the European Patent System go back to at least 1949 when the Council of Europe advocated setting up a European Patent Office. Since the first European Patent Applications were filed on 1st June 1978 the European Patent System and the European Patent Office which administers it have come to play a highly significant role in the field of Intellectual Property not just in Europe but throughout the World. Any consideration of modern patent systems must include the European System and the influence it and its origins have had over the development of patent law throughout the world.

However, the European Patent System unlike other Patent systems did not come into existence in order to fill a patent law vacuum nor did it replace any existing patent laws, even though it reduced application numbers at some national offices. In what way therefore and to what extent do the conventional justifications for the implementation of patent laws apply to the European Patent System? Moreover, who does the implementation of such a system benefit?

Patent laws are no strangers to controversy, being a compromise between the negative aspects of monopoly that they involve and the good of technological progress they can encourage and even enable when steering a middle way between the scylla and charybdis of monopoly and technological failure. And yet such controversy applies mainly to national patent systems. In contrast the European Patent System, in essence a unitary application system overlaying national systems, can be seen to have some objectives, benefits and disadvantages which differ from those of purely national patent systems.

This paper aims to review some of these issues. It also contends that study of the views of users of the system and the manner in which the system has developed holds general lessons regarding the implementation of new IP laws and the importance of pragmatism and politics in this process. Furthermore these findings suggest that the European Patent System, whilst far from perfect, has been of considerable benefit to both those within and outside Europe. Studying the European Patent System suggests that one must be aware of the difficulties of implementing any IP law and yet recognise the benefits of harmonisation and distinguish it from mere proliferation of IP law.

The European Patent System : Implementing Patent Law Harmonisation

Robert H. Pitkethly

Introduction

On 23rd April 1886 a former English teacher, a future manager of a Peruvian silver mine, a former British Bank Employee's assistant and indentured servant, someone who would become Finance Minister of Japan, a future Prime Minister of Japan and an assassin's victim to be, left London's Charing Cross Station bound for France. The journey's purpose : to study of the state of Patent Law in Europe. These might appear unrelated individuals with an unrelated task but remarkably Takahashi Korekiyo's career alone, included not only all these roles but also that of being the first head of the Japanese Patent Office. It was in this role that he travelled to Europe in 1886 as part of a world tour aimed at assessing the state of world patent law with a view to revising Japanese patent law.

For Takahashi the US system proved easier to study but it was also the largest and most advanced patent system of its time with 2.5 times the number of UK applications¹. By comparison, the UK patent system, though among the oldest, was in Takahashi's words "so far behind that one wants to teach them instead" with the German and French systems just as "far behind" in comparison with the US system². This conclusion led to a substantial amount of copying of the then US system by the embryonic Japanese Patent System even down to the application forms used.³ Fashions in Patent Systems change though and whilst the Japanese system may have copied some features of the US system, it later came to differ from it. In a 1988 US Senate Subcommittee hearing Senator Packwood asked the memorable question "you seem to be saying that the Japanese system is more akin on balance to the European System and that ours is kind of the odd man out. Do I read you correctly?". To which the then USPTO Commissioner Mr. Quigg replied "That's correct, sir."⁴ Yet as we shall see even these differences are in turn being eroded, to the extent that in February 1997 the Head of the Japanese Patent Office announced "From now on Japan too is entering the pro-patent era"⁵. It is this gradual erosion of differences and harmonisation of patent systems which has been going on for almost as long as patent systems have existed which underlies this paper.

Times have indeed changed though. Were Takahashi to make a similar trip today he would in all probability not visit London, Paris and Berlin to assess three widely different patent systems but Munich to assess a single system which is effectively the European Standard and some might say

¹ In 1885 there were 23285 US, 8775 UK, 8696 French and 4018 German Patent Applications.

² Takahashi Korekiyo (1936) Takahashi Korekiyo Jiden, Chikurasho.

³ Sakamoto, K. (1989) Takahashi Korekiyo to TokkyoGyousei. TokkyoKenkyuu 9(8) : 34-52.

⁴ Committee on Commerce Science and Transportation 1988

⁵ Hatsumei Tsuushin (1997) 1st March p.1

increasingly the de facto world standard. Yet the very nature of the European Patent System that now exists raises some interesting questions about Patent Systems in general, their implementation and the differences between patent systems and their harmonisation.

In this paper I would like to first sketch the background to the European Patent System and then look beyond it to consider the more general issues it raises of the justification for any patent system, the somewhat different reasons for harmonising patent systems and the constraints of business pragmatism and politics that the development of any patent system, whether harmonised or not, is subject to. I will conclude by summarising some of the key issues which face the European Patent System today.

The European Patent System

The individual Patent Systems of Europe have long histories which have been much written about⁶ and have provided the origin of most of the modern patent laws of the world. However, whilst the term the “European Patent System” might be held to cover this multitude of individual laws I am primarily concerned here with the patent system established under the European Patent Convention (EPC) and with its relationship to the various coexisting national systems within Europe.

Europe too is a term that requires further definition. The geographic sense is perhaps the broadest, whilst within that the 19 strong membership of the EPC is still more numerous than that of the 15 members of the European Union (EU). However both are set to expand, the most recent announcement being that the members of the EPC have invited a further eight central and eastern European countries to join the EPC from July 2002⁷. In announcing the expansion the President of the EPO Ingo Kober said “In the long term, widening the European patent system to include central and eastern Europe will strengthen the new member states' ties with the European Economic Area, as well as smoothing their integration into the European Union”. This perhaps emphasises that the EPC whilst nominally separate from the EU has developed close links with Brussels and the vision of closer harmonisation and expansion is a shared one.

Such a commonality of view though at first seems at odds with the development of the EPC over the years, since the history is one of piecemeal rather than unified development. However, the possibility of piecemeal rather than unified development perhaps explains the success of the EPC as opposed to the Community Patent Convention (CPC).

Before discussing this development though there are some fundamental facts lying behind the integrative aims of most European organisations that need to be remembered. Firstly, the fact that prior to 1945 the major countries of Europe had seldom been at peace or without the threat of war for several centuries has helped create the present climate for integration. The particularly strong

⁶ Prager, F. D. (1944). “A History of Intellectual Property from 1545 to 1787.” *Journal of the Patent Office Society* 26(11): 711-760, covers the earlier period. MacLeod, C. (1988). *Inventing the Industrial Revolution The English Patent System 1660-1800*. Cambridge, Cambridge University Press and Dutton, H. I. (1984). *The patent system and inventive activity during the industrial revolution 1750-1852*. Manchester, Manchester University Press cover the later period in the UK. For a summary of events since 1800 in the UK see Davenport, N. (1979). *The United Kingdom Patent System*. Havant, Kenneth Mason. For developments since 1980 one has to resort to the legal commentaries.

⁷ EPO Press Release 1/99 (See http://www.european-patent-office.org/news/pressrel/1_99_e.htm).

impact of the total war of this century and the sincere desire for peace of those who survived⁸ and who now form the older generation in Europe combined with the idealism of youth brought up in the shadow of war is also perhaps the source of much of the efforts to not just harmonise laws but unify Europe and European institutions. Against this centripetal force is of course matched the centrifugal force of national and particularly linguistic differences. These may seem irrelevant to Patent law and innovation and yet they have had a significant influence on Europe's progress towards a unified patent system and often lack of progress towards a truly unified patent system.

If we examine the progress towards the EPC of today we find that the preliminary moves towards a European Patent System came from the Council of Europe – the forerunner of the present EU. In 1949 this advocated setting up a European Patent Office⁹. At the time Patent Laws in Europe were extremely varied ranging from registration systems such as that in France to systems with some form of search and examination before grant such as that in the UK or Germany. This diversity of laws posed an obvious threat to the creation of a single European market and for this reason the possibility of a unified patent system of some sort, coextensive with the economic system, was proposed. By 1959 the possibility of a separate patent system alongside national systems emerged and the move towards an EC patent system began. This however was thwarted by the failure of the UK to join the EC and when negotiations on UK membership of the EC finally broke down in 1963 the debate as to whether a European or EC system should be adopted intensified. At the same time a basis for the harmonisation of European Patent Law was established through the 1963 Strasbourg Convention on the Unification of Certain Points of Substantive Law on Patents for Invention. By this stage though, the project had split into two and comprised moves towards, on the one hand a system for members and non-members of the EU and on the other hand a unitary system primarily aimed at EU members.

These two diverging paths led to the European Patent Convention and the Community Patent Convention (CPC) and by 1975 both conventions had been signed, at least by some of the interested countries. However, whilst the EPC eventually came into force in 1977 with the first European Patent Applications being made in 1978, almost 40 years on the CPC has still to come into force and is widely seen as comatose if not dead and with only a slight chance of resuscitation.

Table 1 : Brief Chronology of the European Patent Conventions (EPC/CPC)

1949	The Council of Europe advocates a European patent office
1963	Strasbourg Convention on the Unification of Certain Points of Substantive Law on Patents for Invention
1973	Munich Diplomatic Conference on European System for the Grant of Patents European Patent Convention (EPC) signed by 16 of the 21 participating countries
1975	Luxembourg Conference on the Community Patent Signing of the Community Patent Convention by the then 9 EEC member states
1977	Entry into force of the EPC on 7 October 1977 for : Belgium, Switzerland, Germany, France, UK, Luxembourg, Netherlands
1978	First European patent applications received on 1 June 1978
1985	2nd Luxembourg Conference on the Community patent

⁸ Benthem, J.B. (1993) The European Patent System and European Integration, IIC Vol. 24 No. 4/1993 p435-445

⁹ Bossung, O. (1996) The Return of the European Patent Law to the European Union, IIC Vol.27 No.3/1996 p287-315

1989	3rd Luxembourg Conference on the Community Patent Signing of the Agreement relating to Community patents by the 12 EC member states
1991	Diplomatic Conference on the revision of Article 63 EPC
1995	300000th European patent granted
2000	Next Proposed EPC Revision Conference

The European Patent System however, has moved from strength to strength and has expanded from the initial 7 member states to 19 and from the initial application to over 300000 applications. The system however has some limitations. The key point is that unlike the CPC which would have granted unitary patents covering the whole of the now EU, the EPC merely provides a unitary application procedure providing on grant a bundle of national patents effective in each of the up to 19, states designated in the application.

Whilst the EPC is seen as limited but successful, the CPC is widely regarded as a failure which has never been and may never be implemented as originally envisaged. The reasons for this failure are numerous. Firstly the CPC itself was caused in part by the political failure of UK to join the EU in 1963, hardly an auspicious start. Secondly a unitary patent system requires a unitary enforcement system. This proved very difficult to agree on with concerns being raised about differing standards of the courts involved around Europe. Despite proposals for a COPAC (Community Patents Appeals Court) to exercise a unifying influence, the concerns proved hard to overcome. In the case of Ireland and Denmark the fact that the convention was not part of the Treaty of Rome but a separate convention requiring a separate political mandate also proved problematic. Moreover, when the EPC was introduced Industry was cautious and did not actually want the CPC implemented until the EPC had been tried out and found to work. In addition to these reasons, the rationale for the unitary approach of the CPC was somewhat undermined as the EC case law on the free movement of goods developed. Fears over the terminal effect of implementing the CPC on National Patent Offices also abounded and the final straw, despite or perhaps because of the numerous conferences attempting to resuscitate the CPC corpse, were the potentially very expensive translation requirements that member states began insisting on. If there is any hope that the CPC will eventually come back to life it is through the possibility of its eventual adoption by the EU itself rather than as the independent convention originally envisaged.

In contrast the EPC has been highly successful. Applications are now over the 100,000 pa level and any initial fears about “putting all the eggs in one basket”, by using a single application, have not persisted. On the other hand some disadvantages have emerged. Firstly any change to the EPC is difficult to arrange. So far only one change has been possible (to Art 63) allowing extension of the patent term in very limited circumstances. There is however a current proposal to hold a revision conference in 2000 which would result in revision of some other articles of the EPC before mid 2002.¹⁰

The major complaint of most users though concerns the more immediate issue of the cost of translations and national fees on grant. These can in most cases double the cost of an application. Despite current proposals to try to reduce such translation related costs by 50% the problem remains even if it is in reality more just a case of a problem which currently has a sub-optimal solution needing improvement. The EPC therefore is a limited but nonetheless very successful

¹⁰ CIPA 28 (8) p.676

attempt to provide a unitary patent application system even if the patent applicant's dream of a single patent still remains elusive.

Justification of patent systems

Commentators have identified several possible justifications for patent law: That it is, a contract made between state and inventor in order to publish details of the invention, a reward for invention, a means of protecting inventor's rights or that it is simply an incentive to invention and innovation¹¹. More recently Mazzoleni and Nelson¹² have categorised four broad theories about the purpose patents serve : I) A motive for invention, II) an inducement for development and commercialisation of inventions, III) an inducement to disclose inventions, and IV) a means of ensuring orderly development of broad prospects.

Debate about which of these various theories is correct and what implications they have if they are continues. In any event patent laws are no strangers to controversy, being a compromise between the negative aspects of monopoly that they involve and the good of technological progress they can encourage and even enable whilst steering a middle way between the scylla and charybdis of monopoly and technological failure. There are also differences between national interests and foreign interests to be considered. Providing patent protection for all can be seen as encouraging technology imports, encouraging indigenous technology and helping in attempts to argue for protecting national technology abroad. On the other hand some are tempted to see protection of foreign technology as potentially damaging by denying the possibility of free-riding on foreign technology and perhaps denying developing countries broad access to technology. However perhaps the best attitude to be taken towards this approach is that of Okuda Yoshito the Japanese Patent Office Commissioner who in 1890 said in a written opinion sent to the Agriculture and Trade Minister : "as for the idea that Japanese inventions are in an early stage of development and that by granting many important patents to foreigners there is a danger of obstructing the development of industry; if such cowardly things are said Japan's development will never progress at all".¹³

Such controversy though, applies mainly to national patent systems whilst the European Patent Convention, in essence a unitary application system overlaying national systems, can be seen to have objectives which differ from those of purely national patent systems. One must distinguish therefore between the very different motives and justifications for the harmonisation of patent systems as distinct from arguments for the existence of any patent systems at all.

¹¹ Cornish, W. R. (1989). Intellectual Property. London, Sweet & Maxwell p.78 provides a summary of many of the better known references to this debate.

¹² Mazzoleni, R. and R. R. Nelson (1998). The benefits and costs of strong patent protection: a contribution to the current debate. Research Policy 27 (3) : 273-284.

¹³ TsuuSyounSanGyouSyoun (MITI) (1964) SyounKouSeisakuShi - Vol.14 - Tokkyo, Tokyo

Harmonisation of patent systems

The European Patent System as we now have it, unlike other Patent systems did not come into existence in order to fill a patent law vacuum nor did it replace any existing patent laws, even though it reduced application numbers at some national offices. In what way therefore and to what extent do the conventional justifications for the implementation of patent laws apply to the European Patent System? Moreover, who does the implementation of such a system benefit - those within or outside Europe and what are the views of users of the system as opposed to its administrators?

If one ignores the post grant life of a European Patent Application as a set of national patents and distinguishes the European Patent Convention from National Patent Systems in terms of the extra functions and costs the unitary European layer adds to the patent application process; it can be seen that the key benefits reside primarily in cost savings and efficiency but also in issues involving the uniformity and certainty of protection. These are the benefits to be weighed in assessing the worth of harmonisation.

Whilst contemplating these benefits though it is worth remembering that attempts to harmonise patent systems were in existence even before Takahashi's European tour in the 1880s. The European Patent System is, in comparison with other developments in the harmonisation of patent systems, a relative newcomer

In the development of patent law harmonisation perhaps the most important event of the modern era was the Vienna exhibition of 1873. Prior to the exhibition considerable concern was expressed by American commentators about the state of Austrian patent law and its ability to protect exhibitors from plagiarism and piracy, This was expressed most noticeably in an article in the magazine *Scientific American*¹⁴. Since such concerns could drastically reduce the number of exhibitors (as had been the case with some UK exhibitions) it was a major subject of concern.

The Vienna exhibition was held in the midst of a cholera epidemic which understandably somewhat reduced the willingness of potential participants to attend. However, despite this drawback and prompted by the concerns about piracy, a congress was organised alongside the Exhibition to discuss the issue of patents and moves to harmonise them. T.Webster who had been deputed to attend the congress by the UK government became a vice-president of the Congress whilst C.W.Siemens who had settled in the UK (because at the time it offered better patent protection than Germany¹⁵) became President of the Congress putting his bilingual ability in English and German to good use. Werner Siemens his brother who still lived in Germany was also a pro-patent campaigner and also a Vice-President at the congress.

¹⁴ Plasseraud, Y. S., Francois (1983). Paris 1883 Genese du droit unioniste des brevets. Paris, IITEC Librairies Techniques.

¹⁵ UK Parliamentary Select Commission on Letters Patent (1970). Reports from Commissioners and from Select Committees on Letters Patent with proceedings minutes of evidence, appendices and indices 1864-1872. Shannon, Irish University Press. (Perhaps an early instance of the effects noted by Mansfield with US investors : Mansfield, E. (1994). Intellectual property protection, foreign direct investment, and technology transfer. Washington, D.C., World Bank.

One outcome of the congress was a resolution which, inter alia, stated that :

"In consideration of the great inequality of the existing patent legislation, and in consideration of the altered means of international communication of the present time, there is great want of reform, and it is very desirable that the Governments will initiate an international understanding on the patent protection" ¹⁶.

It is interesting to observe that Mr. Paul Hartnack (then UK Patent Office Comptroller General and Chief Executive) said in a recent speech that :

"Arguably the main driver of the trend towards harmonisation of the world's patent (and trade mark and design) systems over the last 50 years has not been WIPO, or the EPC, or the GATT, massive though their contributions have been. Arguably, it has been the demands of a global market driven by the wonders of modern communications technology." ¹⁷

In contrast to the earlier changing times that were noted regarding harmonisation, some other things related to it do not change. However, a key feature of the resulting reforms, particularly to UK patent law, was as to whether the reforms took into account existing patent laws in other countries in their formulation (notably those of the USA) or whether they only paid attention to national considerations. In the UK at least the pursuit of national interest won and independent reform went ahead at least when the Government Patent Bill of 1876 was being discussed¹². This represented a missed opportunity to promote harmonisation since further study at the time may well have revealed features of the US system which might usefully have been adopted - as for example examination later was.

This early example of moves towards harmonisation shows firstly that there is a fundamental conflict in the advancement of harmonisation of patent systems which needs to be resolved for progress to occur. Concern to gain the benefits of greater efficiency and cost savings is balanced by sometimes conflicting concerns about national interests. Secondly it shows that there is a pragmatic need for mutual benefits to outweigh any one party's costs and for a need for the interests of influential people and organisations especially major industry to benefit from harmonisation in order to even begin discussion of it let alone bring it about. Thirdly, circumstances and technological trends and in particular trends towards greater globalisation of the world economy present a tide which it is increasingly difficult for any one patent system to swim against.

Justifying Patent System Harmonisation

Against this background of pragmatism and concern about the benefits and costs of harmonisation as distinct from those of patent systems per se, it is worthwhile looking at the potential costs and benefits of a harmonised system such as the European Patent System. As mentioned earlier the key

¹⁶ Coulter, M. (1991). Property in Ideas: The Patent Question in Mid-Victorian Britain, Thomas Jefferson UP.

¹⁷ Hartnack, P. (1996). Whither the Patent System? LES News Exchange Apr/May (49) : 10-11.

benefits divide roughly into those associated with cost savings and efficiency and those associated with the uniformity and certainty of protection.

For any harmonised patent system involving a degree of unification there is a point where the ability to process multiple applications in a single procedure yields cost savings. For the European Patent system this has generally been reckoned to be the case where three or more countries are designated in the European application. When many more countries are designated the savings in official fees, agents fees and internal costs through only having to deal with one application can be substantial. Though it is more the case with the PCT system than the European Patent System, harmonised systems can sometimes allow savings through delays in incurring costs. One such delay common to both PCT and European systems is the delay in incurring translation costs. Indirect cost savings can also result from transaction cost savings in simplified procedures within companies for dealing with what would otherwise have been a wide range of varied national procedures.

Of course inherent in this balance of the costs of separate applications against a unitary application are the level of costs imposed by the harmonised system itself. Two critical areas exist regarding European patent applications. The cost of translations and the level of official fees which applicants face. Needless to say it is precisely these two areas which excite considerable interest in discussions about the development of the European Patent System.

The other area which can produce significant benefits from harmonisation is that connected with the standard of protection afforded by a harmonised application system. A harmonised application system though does not afford a standardised level of enforceability in the various national courts. It was in some senses the failure to create such a system through the COPAC that in part led to the failure of the CPC as a whole. However, a harmonised application system does enable an applicant to benefit from an increased predictability about the level of protection that he or she might benefit from. Though the "all the eggs in one basket" problem was initially seen as a potential drawback to the European system this view did not last long. Some applicants did at first file some applications as both national and European applications on the basis that, whilst the applications could not both be granted, one or more might succeed where the others failed and this might be useful especially if the European application as a whole failed. In addition to the unitary application procedure of course, use of an European Patent Application also runs the risk of a unitary opposition procedure which contributed to initial "all the eggs in one basket" fears.

The reality though twenty years after the implementation of the European Patent System is that filing redundant applications confers too few benefits in relation to the costs to be justified. Perhaps a key reason behind this is that though there are still some differences in interpretation of laws and patents between the various countries' courts, in general the standardisation of Patent Law throughout Europe means that the likelihood of differing decisions on patentability is too small relative to the expense of separate applications. One big egg basket is just as safe and usually cheaper than many identical little egg baskets all tied together.

There is however one other potentially negative public policy implication of harmonised systems and that is that it reduces the variety among patent systems and thus reduces the breadth of experience that can be gained of a range of patent systems. It can be argued that harmonisation leads to fewer possibilities for understanding the advantages and disadvantages in practise of good

and bad patent laws. However, whilst this might illustrate the importance of variety in systems, the reality is that any such consideration is unlikely to carry much weight amongst those in a position to influence policy creation at a national industry level.

One might argue that one contributing factor to the success of the European Patent Office over the past 20 years has been the fact that unlike most other patent systems there is an alternative. Those wanting patents in Europe have a choice of routes to choose from and whilst the financial choice forms a large part of the decision, both that and issues of the quality of the service provided by the EPO are factors in influencing applicants decision to use the system. The very existence of choice transfers power to the customer the degree of power transferred depending on the degree of choice available. It is thus not surprising that the EPO has in the past commissioned research on what applicants think of the system. In one such survey the four most important advantages stressed were that there was a single procedure with a centralised examination, that European wide protection was provided, that the system provided applications which were cheaper than 4 individual applications and that there was a smooth and simple procedure. This latter point was stressed more by large companies (>500 employees) than smaller ones. The main disadvantages seen by applicants were that the system was too expensive and too slow.¹⁸ In the case of Japanese users of the European Patent System a programme of interviews showed that the main benefits are seen to be direct cost savings and the ability to prosecute a single application in English rather than a multitude of applications in a multitude of languages. The potential concentration of risk by using a single application was not seen as significant nor was the loss of variety in patent laws through using a harmonised system.¹⁹

The importance of cost and efficiency advantages and the fact that the main disadvantages are in reality a dissatisfaction that the same advantages are not greater still and that still greater savings might be possible, reflects at the same time both the success and the failings of the system. That these are key issues is reflected in the amount of discussion of them that has occurred over the past few years and the recent moves to try to reduce official fees wherever possible.

The abovementioned EPO survey highlighting high costs as a disadvantage of the system was carried out in 1994.¹⁸ However, since 1996 the EPO has been pursuing a policy of fee reductions and in December 1998 a second round of fee reductions was announced. In the past three years reductions have been made in the filing, designation and search fees, and also in the cost of patent information products and services. Overall these will save European patent applicants around DEM 250m per year.²⁰

As the EPO itself states²⁰ perhaps the most significant costs are not official fees but those outside the control of the EPO such as patent agents' fees and translations costs. The latter currently account for nearly 40% of the cost of an average European patent maintained for ten years in eight countries. It is with the subject of translations though that we meet the other side of harmonisation which is the restraint placed on it by national self-interest.

¹⁸ R.Berger (1994) Utilisation of Patent Protection in Europe, EPO Script 3

¹⁹ Interviews with 52 Japanese Industry IP related Employees 1995/6

²⁰ EPO press releases: 11 December 1998 (http://www.european-patent-office.org/news/pressrel/7_98_e.htm) and 18 June 1998 (http://www.european-patent-office.org/news/pressrel/981084_e.htm).

Constraints of business pragmatism and politics

The subject of translation costs and the possible solutions to the problem is one that has occupied a considerable amount of attention and verbiage over the past few years. This is an issue which clearly illustrates the balance between national self-interest and the self-interests of applicants. On the one hand every country would prefer to have patent applications effective in its state, published in its own official language. Accepting any other solution to the language problem may be very difficult politically. On the other hand, it is in every applicant's interest to have a system which minimises the costs of using the system and thus minimises the need to prepare multiple translations into the language of each designated state when the application is processed in the language of only one. There is no need to delve into the detail here but most recently a working party set up by the InterGovernmental Conference has been instructed to report on proposals to reduce translation related costs by 50%²¹ It seems likely that eventually pragmatism will prevail over politics but progress has not been as fast as most would like.

The issue of translations and costs and the lobbying surrounding them, raises the larger question of what drives separate patent systems towards harmonisation. In order for countries to take part in a harmonised patent system there are several pre-conditions. Both countries must obviously have or be prepared to install an IP system. Both countries should be interested in trade in technology rather than any isolationist policy. Any proposed changes must be mutually and directly or indirectly beneficial to the country as a whole in order to motivate the political will needed to implement them. Finally any proposed changes must benefit industry in the countries concerned in order to motivate the pressure needed to bring about change that political considerations might tend to ignore. But which people and enterprises influence harmonisation?

If we look at the types of harmonisation of patent systems that are possible we can see that they divide into two types those involving standardisation and those involving unification. The former comprises most famously multi-lateral treaties such as the Paris Convention which derived from the meetings in Vienna in 1873 mentioned earlier. Others include agreements such as the GATT TRIPS agreement. This is perhaps even further reaching than the Paris Convention in its effects due to its association with more general trade issues.²² In addition to these, there are also bi-lateral treaties. A good example of such treaties are those based around the US Semiconductor Chip Protection Act. This only afforded foreign applicants protection if their country had implemented laws providing equal treatment for US applicants. Whilst the importance of the protection afforded may have been overestimated at the time, the threat of losing protection in a market as important for semiconductors as the US effectively forced a wide range of countries to rapidly implement similar systems. Such systems were implemented whatever their views on the wisdom of such a method of proliferating IP systems. In effect unilateral decisions by the US as to the form protection should take were implemented by bilateral agreements with none of the other parties being individually in a strong enough position to arrange any substantially different solutions.

²¹ CIPA 28 (8) p.660, for text of mandate see :<http://www.patent.gov.uk/snews/mandate.html>

²² One might compare this with the way in which Japan's accession to the Paris Convention was linked to the reform of the early "unfair" trading treaties with the West (Pitkethly, R. (1993). *The Formation of the Japanese Patent System, 1853-1885* MSc. Thesis Stirling University)

The other main form of harmonisation comprises unification of patent systems. This may be subdivided into partial unification usually involving just the pre-grant application phase such as that achieved by the EPC and the PCT. Total unification includes both pre- and post-grant phases as intended by the CPC. In all of these cases though and throughout the history of harmonisation of whatever sort the key lobbyists have been the major industrial companies with an interest in promoting such systems.

That harmonisation is primarily driven where politics permits by the interests of industry is clear but another key feature which emerges from the briefest view of attempts at harmonisation is that it is, like most other intellectual property legislation, a one way process. IPR may stand not so much for Intellectual Property Rights but for Intellectual Property Ratchet. But however much effort it may require to reach the next stage it may require considerably more to disengage the retaining pawl and move the system back to a less legislated state. The above examples of the United States' unilateral promotion of Semiconductor chip protection act, the GATT / TRIPS agreement and the general proliferation and strengthening of IPRs in Europe all lend support to the idea that a process of gradually increasing legislation is in train.

There are several examples of the difficulties of making any attempt to abandon or weaken IPR systems. In the period between 1860 and the First World War Germany had become pre-eminent in organic chemistry research. In fact in that period it was a common part of a British Chemist's education to do a research degree not in the UK but in Germany. There was thus a natural wish to increase the emphasis on research in the UK and improve the competitive position of the UK chemical industry.

Against this background two major changes were made to UK patent law. Firstly in the revision of the patent law in 1883, compulsory licensing provisions were introduced which enabled UK companies to obtain licenses to patented inventions which were not being worked in the UK. Chemists in both France and the UK had played a part in starting the dyestuffs industry and then lost their lead to Germany²³ and so it is not surprising to find that France and the UK but not Germany were founding members of the 1883 Paris Convention which permitted the use of compulsory licence provisions on grounds of non-use. Secondly, in 1919 the UK continued to try to weaken the rights of foreign patentees in the chemical industry by abolishing the possibility of obtaining patents for chemical products in the UK. This was intended to enable UK manufacturers to manufacture products discovered by German Chemical companies provided a new synthetic route to the compound could be found. Pharmaceuticals and Foodstuffs were also subjected to licenses of right whereby any manufacturer could demand a license from a patentee of any pharmaceutical or foodstuff whether the invention was being worked in the UK or not.

It was only in 1949 that the exclusion of chemical product patents was repealed, by which time the German Chemical Industry was presumably no longer seen as such a threat. In 1977 the compulsory license provisions for pharmaceuticals and foodstuffs were also abolished. That they were, was as a result of British research based companies making representations to the Banks Committee formed in 1967 to consider the state of UK patent law whose recommendations formed

²³ Wahl, A., F. W. Atack, et al. (1914). *The Manufacture of Organic Dyestuffs*. London, G.Bell & Sons, Ltd.

the basis of the 1977 UK law. British research based companies were by then very much more concerned about those not conducting research benefiting from their research efforts than about German research efforts being too far in the lead.

These changes had thus occurred as a direct result of pressure for the patent system to be adjusted to suit British Industry. Furthermore, the changes introduced, which were in a sense retrograde steps in many respects, did not persist. A further more drastic example of an attempt to put back the clock in terms of the development of patent systems is the abolition or downgrading of the patent system in the Netherlands between 1869 to 1912 and in Switzerland between 1850 and 1907.²⁴ In both cases the attempt to put back the clock failed and perhaps shows that despite numerous discussions over the years about abolishing the patent system it is fairly certain that even if the system were found to be slightly sub-optimal it is not one that any one country can change unilaterally without considerable disadvantage.

It thus seems that pragmatism prevails over politics where patents are involved. National interests will largely be seen to be those of major Business interests and these appear to be the driving force behind change in IP laws whether at home or abroad. Countries at a disadvantage in a particular sector are still likely to be tempted to weaken their IP protection in such fields especially in respect of foreign applicants unless sanctions are strong enough to stop them.

Attitudes towards patent laws and the possibility of harmonising them depend on a commonality of interest amongst the harmonisers. This might occur through a conjunction of interests or through one party having a dominating position it is in the other parties' best interests to agree to. As the Semiconductor Chip Protection Act incident shows it is no surprise that US interests and proposals regarding IP protection with the backing of the huge US domestic market wield considerable influence irrespective of their merits.

The ultimate aim of a partially or totally unified world patent system is still some considerable way off. However, with the interests of the US, Japanese and European countries more in-line with each other now than at any time previously and with European countries in the form of the European Patent system presenting more of a united front than hitherto and thus together with Japan providing more of a balance to US influence, moves towards greater harmonisation are more likely now than ever before, even if the speed of movement still remains somewhat glacial. Harmonisation is constrained by pragmatism and politics but sometimes the constraints can still allow considerable movement.

Thus revision, harmonisation, standardisation and unification of patent laws are hindered by political blocks such as a need to preserve national languages and patent offices, the self interest of followers, radical change and the need for multilateral agreement both of which can be difficult to arrange. It is however promoted by industry lobbyists, the national self-interest of leading nations, and incremental change and bilateral agreements both of which are certainly easier to arrange.

²⁴ Schiff, E. (1971). *Industrialisation without Patents : The Netherlands, 1869-1912, Switzerland 1850-1907*. Princeton, New Jersey, Princeton University Press.

The lesson to learn from this perhaps is that whilst commentators can speculate on changes in patent law and the benefits or otherwise of such changes, the only changes with any chance of successful implementation are those which are perceived to be beneficial by the wide range of players actively involved ranging from industry to government.

Key Issues facing the European Patent System

The European Patent System as with any patent system depends for its support on a variety of interests both commercial and political and these and other factors also serve to constrain the system's freedom of manoeuvre in the course of its development. The history of the EPC has been one of attention to the needs of its users but very much within the constraints of the legal system of which it is part. It is thus in large part the rewriting of the boundaries constraining the EPC and the structures surrounding it that encompasses the key issues facing the EPC over the next few decades. As we have seen setting up and amending a convention with as many interested parties as the EPC involves is no simple task and progress in any task which involves such amendment is likely to be slow at best. However, the following trends can be envisaged.

As the opening in 1996 of the Office for the Harmonisation in the Internal Market in Alicante in Spain shows (otherwise known as the Community Trade Mark Office) future IP law in Europe is likely to be firmly angled towards emphasising the market as well as legal harmonisation effects. That was the emphasis of the original moves towards a European Patent System and it can be expected that if an opportunity to make substantial revisions to the European Patent Convention occurs some recombination of the elements of the CPC and EPC might be possible. One additional guide as to the future course of IP legislation in Europe in this respect is given by the recent European Commission's Green Paper on the Community patent and the patent system in Europe and subsequent communication issued earlier this year²⁵.

The initial Green Paper makes the specific point that "almost forty years after the Treaty of Rome was signed, companies doing business within the Community still do not have access to a single system of patent protection." Furthermore "Patent protection is ensured in the European Union by two systems, neither of which is based on a Community legislative instrument: the national patent systems and the European patent system." It is quite clear from these statements that though the CPC may well have been comatose for a long while it may be about to make a recovery – providing there is enough public support. Of course if it does make a comeback it will have to be a substantially revised CPC to stand any chance of success and in particular the thorny problems of translation requirements and the arrangements for trying cases involving community patents will need addressing as well as the issue of costs.

The resurrection of the CPC though raises the further issue of the relationship between the CPC the EPO and the EU. Tied up with the issue of the relationship between the EU and the EPO is the question of whether the EPO might ever lose its current independent status and fall under the wing of the European Commission, something raised indirectly by the recent Green Paper and recognised by the recent communication. However, at this point the issues become highly labyrinthine²⁶. The

²⁵ 1997 Green Paper : <http://europa.eu.int/comm/dg15/en/intprop/indprop/558.htm> ; subsequent 1999 Commission communication : <http://europa.eu.int/comm/dg15/en/intprop/indprop/8682en.pdf>

²⁶ Lees, C. (1999). EPO - the Question of Power. CIPA 28 (8) : 688-699.

simplest way of summarising the problems is to say that the EPO as currently structured is independent but ponderous, requiring the consent of all interested parties to move in any direction. A system whether the European Patent System as at present or the CPC or both structured under the wing of the European Commission might be quicker to respond to circumstances but on the other hand might be less able to respond to the concerns of individual countries and more a law unto itself. Furthermore if the system or systems come under Commission control but with EPO administration how would the independence of the EPO be reconciled with it acting as a Commission department? That still of course leaves aside the issue of the discrepancy between membership of the EPC and the EU. This debate is obviously one which has some way to run before it is in any way resolved.

Costs also form another more general issue facing the EPC. At present the costs of entering the national phase following grant effectively doubles the cost of the patent application and renders protection in the European market arguably more expensive to obtain than equivalent protection in the USA or Japan. The EPO announced further filing and designation fee reductions at the end of last year and continued work can be expected aimed at reducing fees. Work on reducing fees is also closely related to the issue of use of the system by SMEs for whom the high administrative costs are a significant deterrent. At present there are several proposals for reducing costs on grant. The most significant of these concern translations which countries can request under Art. 65 EPC. The general opinion is that only a small percentage of any such translations filed are ever read by anyone, making the case for their abolition hard to ignore. The most radical solution involves making use of a single language compulsory whilst several other less contentious solutions involve translation on demand, compacted specifications and the so called "Package" solution comprising a number of measures including an extended abstract. Quite apart from the issue of existing translation costs the future of the CPC will be bleak unless Community Patents are no more expensive to obtain than US patents²⁷.

The work on a proposed European Utility model is another aspect of work which is aimed at fostering innovation among SMEs and has received much support from the Max Planck Institute in Munich²⁸. It is highly significant that the proposed law would in effect be administered by the EPO but be under the auspices of the EC. However, little comment has been made about the experience of the Japanese Patent Office following revision of their Utility Model law to render the system an unexamined one with a shorter term than hitherto and similar to that proposed for Europe.

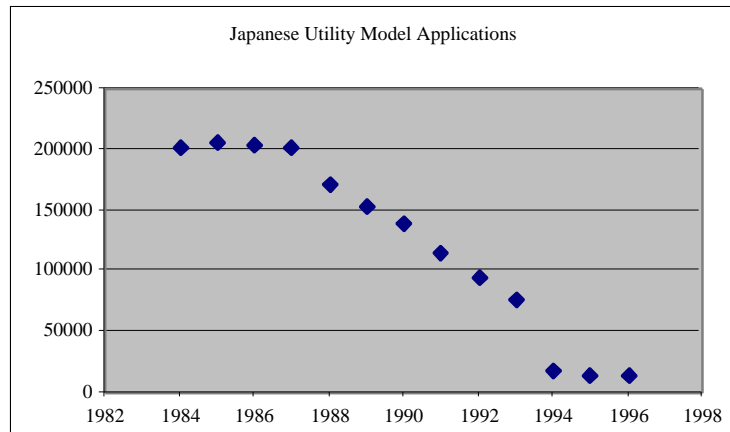
The Japanese system has recently suffered a massive drop in filings and is now a mere shadow of its former self (Graph 1). This is obviously tied up with changes in Japanese Patent and Utility Model law but this alone suggests that no system of IP law is "an island, entire of itself"²⁹ and the Japanese experience should at least be studied more closely in planning any European system.

²⁷ Nott, Robin (1998) Finding a consensus for cutting costs, *Managing Intellectual Property* March p.43

²⁸ Kern, M. (1994) Towards a European Utility Model Law Vol. 25 No.5/1994 p627-648 for the latest version of the proposal for a directive see : <http://europa.eu.int/comm/dg15/en/intprop/indprop/utility.htm>

²⁹ John Donne (1634) Meditation XVII in *Devotions Upon Emergent Occasions*

Graph 1



A final major issue facing the EPO is enlargement. The EPO already has plans to expand the membership of the EPC to include eight eastern and central European countries in July 2002. The EU currently comprises 15 members but association agreements between the EU and Bulgaria, Romania, the Slovak and the Czech Republic and also three Baltic states : Estonia, Latvia and Lithuania come into force in 1995. Liechtenstein now participates in the European Economic Area and Romania, Slovakia, Latvia and Estonia, Lithuania and Bulgaria all applied to join the union in 1995. Thus both the EU and EPC are set to grow and the IP laws and infrastructure of the Union must in a sense grow too.

Conclusion

This paper has discussed the way in which harmonisation of patent law can result in not more IP law but less and more efficient and cost effective patent laws which benefit all parties; something which can only be good for the promotion of innovation. The European Patent System is a compromise but in many senses a successful one, not least in terms of the use made of it by applicants from many countries. The level of applications that has been reached over the past twenty years is effectively a vote of confidence in the system.

It is worth noting also that the interviews of Japanese companies showed that they were without exception in favour of the system. The benefits of the system in other words are spread wider than the members of the system itself. Foreign applicants in effect receive the benefits of the unified application procedure and of the consequent cost savings merely by applying, even if their own country is not the member of any similar unified system.

However, continued criticism of some aspects of the system means that there is still room for improvement and the system is in some senses a compromise solution which attempts to gain as many of the advantages of harmonisation throughout Europe without confronting the stronger feelings of national interest that full unification would incur if, for example, the CPC were implemented. The implementation of any intellectual property law is a matter of pragmatism and politics and changes to the EPC and to IP Systems generally to foster innovation are subject to the constraints of their industrial and political environment. Proposals to change laws must consider

the practicality of gaining sufficient support for their implementation and the balance of differing interests that might be affected.

It thus may be difficult to proceed quickly with any proposal for patent or IP law harmonisation but any such progress which in some senses counters rather than contributes to the excessive proliferation of IP laws is to be welcomed. One should distinguish between harmonisation and proliferation, IP Law can be good but perhaps with IP Laws you can sometimes have too much of a good thing.