

CA/91/10

Orig.: en

Munich, 09.06.2010

SUBJECT: Summary of the Study on the Economic Dimensions of the Fee Structure in the European Patent System

SUBMITTED BY: President of the European Patent Office

ADDRESSEES: Administrative Council (for information)

SUMMARY

In 2009, the EPO has commissioned an independent study to economically assess the current fee structure of the European Patent System and to explore feasible alternatives under welfare aspects.

The study has been undertaken in the context of the ongoing debate on fee reform and sustainable financing of the European Patent System (cf. CA/34/10, CA/38/10, CA/39/10, CA/82/10). The intention of this specific study is to support the discussion with more systematic and empirical evidence.

This document provides a summary of the findings.

TABLE OF CONTENTS

Subject	Page
I. STRATEGIC/OPERATIONAL	1
II. RECOMMENDATION	1
III. MAJORITY NEEDED	1
IV. CONTEXT	1
V. ARGUMENTS	2
A. MAIN MESSAGES	2
a) The traditional view of the role of patent fees	2
b) Examples of existing fee policy in Europe	3
c) EPO procedural fees and the development of European applications	4
d) National Renewal Fees as a sorting device	5
B. OUTLOOK	6
VI. ALTERNATIVES	6
VII. FINANCIAL IMPLICATIONS	6
VIII. LEGAL BASIS	6
IX. DOCUMENTS CITED	6

I. STRATEGIC/OPERATIONAL

1. Strategic.

II. RECOMMENDATION

2. Not applicable.

III. MAJORITY NEEDED

3. Not applicable.

IV. CONTEXT

4. In 2009, the EPO has commissioned an independent study to economically assess the current fee structure of the European Patent System and to explore feasible alternatives under welfare aspects.

5. The study was undertaken in the context of the ongoing debate on fee reform and sustainable financing of the European Patent System (cf. CA/34/10, CA/38/10, CA/39/10, CA/82/10). The intention of this specific study was to support the discussion with more systematic and empirical evidence.

6. In particular, the purpose of the study was

- To conduct a critical assessment of the existing economic literature in order to assess whether the traditional intended roles of fees is challenged by recent developments.
- To describe the fee policies of a number of NPOs and to interpret them in light of the theoretical framework identified.
- To analyse the relationship between EPO procedural fees and the development of European applications in order to assess how applicants' decisions within the step-by-step procedure respond to changes in procedural fee levels.
- To gather empirical evidence whether national renewal fees play their role as a sorting device.

V. ARGUMENTS

A. MAIN MESSAGES

a) The traditional view of the role of patent fees

7. The review of the economic literature indicates that the traditional view on patent fee policy - which is also the one from which welfare implications are typically drawn - is overrun by reality. More recent literature challenges the traditional fee policy characterised by low procedural fees to encourage patent filings.
8. The traditional patent fee policy is characterised by low procedural fees to make the system widely accessible and renewal fees that have the primary goal to induce patent holders to give up their monopoly rights and - at the same time - subsidise the examination activities carried out on unsuccessful applications. Therefore the traditional view focuses on two of the three phases of the patents' life-cycle. The literature on optimal patent length/breadth is mainly concerned with how patents should be designed in order to provide firms with enough incentives to invest in R&D (investment phase). The literature on optimal fees is mainly concerned with the design of renewal schemes that act as a welfare improving sorting device for patent rights that already exist (renewal phase).
9. The application phase was largely regarded as a black box, whose functioning is assumed to be perfect. Contrary to the traditional literature, most recent studies tend to focus on the application phase. The original policy rationale for setting low procedural fees seems outdated because the scarce resource is no longer patenting activity but the patent offices' capacity to process applications. The original function of patent offices (i.e. to grant predictable property rights in a reasonably short time) is put at risk both by the excessive workload that many offices bear and by applicants' practice to 'game' the application procedure.
10. Moreover, most literature assumes the existence of a single patent authority and a single representative market where patent protection can be sought. This assumption is a reasonable simplification to describe the US system, but it is too restrictive when applied to the European patent system. The fact that each patent granted by the EPO can be maintained in multiple jurisdictions adds (on top of length and breadth) a third dimension (i.e. geographic scope), making EPO patents a more complex entity than two dimensional patents typically considered by the literature. Moreover, often self-financing national patent offices are

responsible in setting renewal fees that apply to each patent granted by the EPO. This creates the possibility of misalignment of incentives which could result in suboptimal fee policies.

11. Hence, a theoretical framework designed to reflect the reality of the European patent system has not been proposed by the literature. The welfare consequences of the co-existence of a centralised and national procedures have not yet been analysed. Nevertheless, the traditional view on patent fee policy is challenged by reality and evidence suggests that procedural fees could play a much more prominent role as a sorting device.

b) Examples of existing fee policies in Europe

12. The study reviewed fee policies over the last 10 years in a sample of six National Patent Offices (CH, IT, UK, NL, NO, HU). Particular attention was paid to the following:
 - Financing structures and the fee setting roles of NPOs
 - Purposes of and linkages between procedural and renewal fees
 - Recent challenges facing the NPOs
13. All patent offices in the sample adopt, to some varying degrees, the traditional fee policy approach. Indeed, for the entire sample of NPOs, revenue from renewal fees constitutes a much higher proportion of income than from procedural fees. It seems very unlikely that NPOs could move away from this traditional fee policy, because high procedural fees would be politically unacceptable. Only one of the offices stated that fee policies based on increases in procedural fees are not necessarily infeasible.
14. Another important aspect that limits the possibility of new policies which make use of procedural fees as sorting device is the financial agreement between NPOs and the EPO. In many cases, NPO revenues are driven by renewal fees on patents granted by the EPO. Thus there is no direct link between the patent processing work and the fee income. Consequently NPOs are unlikely to feel the urge of adopting radical changes in fee policies because the pressure associated with the increasing strategic use of the application procedure is being experienced mainly by the EPO.

15. It appears that those offices that are self financed have a 'flatter' renewal fee schedule than those that are fully (or partly) financed by the state. In general, self-funding patent offices tend to have a higher procedural fees-to-renewal fees ratio than fully-funded offices.
16. NPOs differ also with regard to the primary objectives that fees are supposed to reach. In line with the principle of the traditional patent fee policy almost all NPOs recognise the cost recovery role of renewal fees. Interestingly, self-financed offices indicated that social welfare considerations are not taken into account when setting renewal fees. One office indicated explicitly that renewal fees are set with the primary purpose of influencing the Office's income.
17. For all NPOs considered the primary goal of procedural fees is to recover at least partially the applications' processing costs. Self-funded offices tend to have higher procedural fees compared to renewal fees. Amongst the NPOs considered, one explicitly recognises the potential sorting role of procedural fees.
18. However, some offices charge fees, such as excess claims/pages fees, which have the potential of steering applicants' behaviour. One office has a rather sophisticated system, the most interesting feature of which is probably represented by the progressive structures of the fees for amendments and the fees for the request of extension of the time limits. These fee amounts are lower for the first amendment/request, but progressively increase with each amendment/request. In order to conclude whether such a fee can be considered a 'success story' further investigation is required.
19. Overall, the evidence gathered suggests that NPOs' financing status has an impact on both the broad goals of the fee policy and the setting of individual fees.

c) EPO procedural fees and the development of European applications

20. Each procedural stage, search, examination, and grant, is subject to a specific set of fees. Most fees need to be paid in order for an application to proceed to the next stage, while some other fees might affect the behaviour of applicants who have already entered a certain stage (e.g. fees for further processing might affect the decision to request further processing in the examination phase).
21. The analysis addresses both types of decisions. The results indicate that the development of patent applications within the EPO step-by-step procedure is

generally governed by the 'law of demand' i.e. all else being equal, an increase in the fee amount to be paid in order to proceed to the next stage decreases the probability of an applicant to proceed further. All fees examined have a statistically significant and negative impact on applicants' decisions to proceed to the next stage. However, the magnitude of these impacts is very different, which implies that not all fees would be equally effective if used as a sorting device.

22. The impact of filing and search fees is negligible, which suggests that the overwhelming majority of applicants who file with the EPO do so having already anticipated the payment of these fees. The relatively limited role that filing and search fees could play as a sorting device was also confirmed by the analysis conducted on French patent applications. The main rationale for filing a first application directly with EPO (rather than at INPI at lower fees) is represented by the possibility of filing in the English language and, consequently, simplifying communication with non-French inventors.
23. Examination fees, in contrast, have a substantially larger impact on applicants' propensity to proceed to the further stage and could therefore be a much more effective sorting device.
24. Finally, fees for further processing are those having the largest impact on applicants' behaviour. More specifically, they have a significant discouraging effect on applicants' decisions to request a first further processing, whereby this effect decreases with the number of further processings already requested. In other words, the same fee amount discourages applicants from requesting a first further processing more than it discourages applicants from making another request.

d) National Renewal Fees as a sorting device

25. The evidenced gathered suggests that national renewal fees play their role in that
 - Patent life might increase if the renewal fee structure changes from a progressive structure to a flat structure.
 - Patent life increases if the absolute level of renewal fees is decreased.
 - Short-lived patents are more sensitive to renewal fees than long-lived patents.

26. Besides renewal fees, the following factors play a significant role in influencing patent life
- Scope of protection: patents with more claims are likely to live longer.
 - Geographical scope: a higher number of designated states at grant is associated with a longer lifetime of a patent.
 - Opposition: patents that have been (unsuccessfully) opposed are likely to live longer.

B. OUTLOOK

27. The final report will be made available in June 2010. It is currently planned that a meeting of the Economic Advisory Group will be organised in the course of 2010 to discuss the findings."

VI. ALTERNATIVES

28. Not applicable.

VII. FINANCIAL IMPLICATIONS

29. The cost of the study was 140.000 Euro.

VIII. LEGAL BASIS

30. Not applicable.

IX. DOCUMENTS CITED

31. CA/34/10, CA/38/10, CA/39/10, CA/82/10.