

User satisfaction survey of
the search services
of

The Spanish Patent Office

in the fields of

Electrical Machines
Human Necessities
Audio & Video Media
Electronics
Computers

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ITM Research/Motivaction
drs. S. Jönsson
drs. R. Doornbos
European Patent Office
R.Heijna

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1 Introduction

1.1 Background

Since the advent of the partnership between the European Patent Office (EPO), the Spanish Patent Office (OEPM, Oficina Española de Patentes y Marcas) and the Swedish Patent Office (PRV, Patent- och Registreringsverket) for the execution of international searches it had become desirable to extend the user satisfaction surveys that had until then be done for EPO search services only, to OEPM and PRV search services. In this way valuable feedback from the user community comes available for the three partner offices.

The EPO commissioned ITM Research in Amsterdam to carry out a telephone survey for search services of the EPO, the OEPM and the PRV in various industrial sectors in parallel.

This report is a summary of the results for the Spanish Patent Office in the fields Electrical Machines, Human Necessities, Audio & Video Media, Electronics and Computers. It has been necessary to combine the results for the five sectors in order to arrive at numbers big enough be able to draw conclusions at an acceptable level of reliability.

The survey followed the methodology as successfully developed in 1997 by the European Patent Office (EPO), in conjunction with ITM Research in a pilot satisfaction survey. The pilot survey was conducted in de sectors 'Transport' and 'Engines, Pumps and Thermodynamics'. The experience of this pilot and the next sectors 'Biotechnology' and 'Pharmacy' led to well-established way of proceeding. For an overview of the surveys conducted see list of reference in the appendix.

1.2 Research Objective

The search partners wish to contain information about how OEPM search services are perceived by its users. Broadly, the objective of the research can be stated as follows:

To deliver information on applicants' and attorneys' satisfaction with the OEPM search services in the industrial sectors electrical machines, human necessities, audio video media, electronics and computers and to provide information that can be used to improve services levels by the search partners.

That is to measure the quality of OEPM search services as perceived by the external users.

1.3 Research method

The survey has been carried out in co-operation between the EPO, the OEPM and ITM Research/Motivation.

The survey comprised three phases: the first being the design phase, including providing ITM Research with the sample of respondents. The second phase being the survey itself and the third phase is the analysis of the results.

1.3.1 First phase: design of the survey

The OEPM team conducts the preparation phase. A list of all applicants and attorneys who had received an international search report in the sectors mentioned above (defined by the IPC classes) over the survey period, was drawn up (i.e. individuals, small companies, large companies, attorneys). Each applicant/attorney should only be contacted once for the survey.

The EPO then gave advance notice to all the potential respondents about the survey and that if they were contacted by ITM Research there would be some questions about a specific dossier mentioned in the letter. This allows potential respondents to better prepare themselves.

1.3.2 Second phase: execution of survey

In the second and execution phase ITM Research carried out the telephone interview based on the list furnished by the OEPM/EPO team taking full account of the required stratification.

The survey was carried out using ITM Research Computer Aided Telephone Interviewing (CATI) system. This method ensures close scrutiny of the response and accurate monitoring of the assimilation of the random sample. The interviews were conducted from the ITM Research call centre in Amsterdam. Interviews in Japan were conducted using paper and pencil method.

1.3.3 Third phase: analysing the results

In the third phase the basic report is prepared by ITM Research. The EPO conducted additional analysis to complete the report.

1.4 The sample

Previous surveys (see reference list) had indicated that there are two distinct types of external users, namely applicants (including representatives working in-house or for an applicant) and professional representatives (or attorneys) working independently.

1.4.1 Response rates

The total numbers of complete interviews is 64. Response rates are very high for this kind of research, in Spain, 51% of all applicants responded and 77% of all representatives. Main reason for not responding was that there was no company (22%), a wrong telephone number (7%) or refusal (7%).

Stratification

The number of addresses provided was limited. ITM research therefore attempted to conduct interviews with as much respondents as possible.

1.5 Report

Respondents are asked to rank their satisfaction of particular aspects of the OEPM search services on a five-point scale:

- very good (5)
- good (4)
- satisfactory (3)
- poor (2)
- very poor (1)

In all surveys, it is important to understand what the respondents mean when they choose the mid-point of the scale. The attribution 'satisfactory' could mean just that, or mildly displeased, genuinely satisfied, etc., depending on the population of the respondents. After the pilot surveys in 1997 ITM Research and the EPO employed several well-proven methods to determine what was meant by the mid-point 'satisfactory' and came to the conclusion that it was actually associated with a 'poor' rating. For the current survey this association was assumed to remain applicable. Therefore only the users who answered 'very good' or 'good' are counted as genuinely satisfied users.

Note: for this report 46 persons were interviewed. This number usually is too low to draw firm conclusions on. However, since response rates for Spain are very high and over 50% of the population has been interviewed, we think these results will prove to be valid.

1.6 Reliability

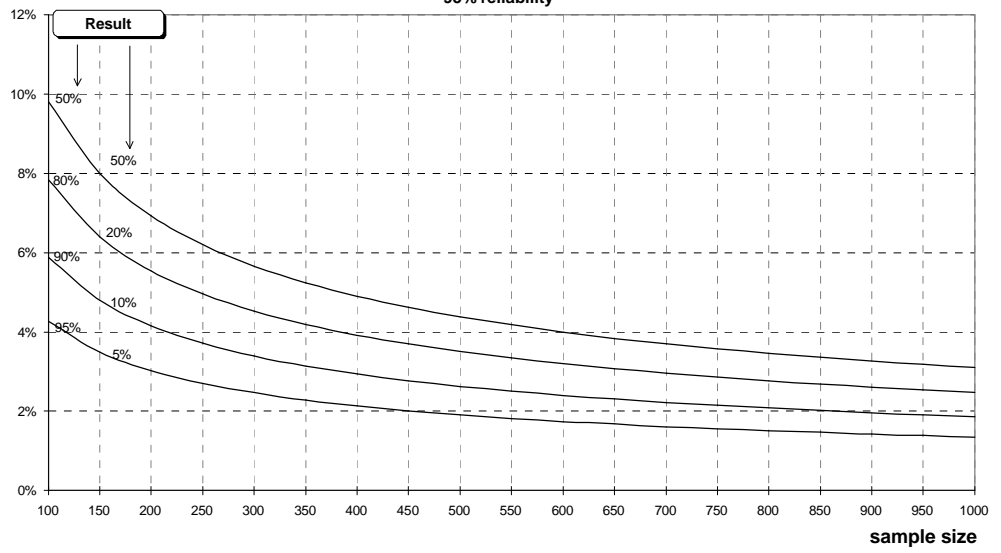
In research results are obtained that should be interpreted by taking into account error margins. Results obtained from the sample may differ from population values. The precision margins can be read from the nomogram given below.

This study granted a total sample size of N=64, which means the 95% precision margin for a result of 30% is 11.23%. The same margin applies for a result of 70%. For a result of 50%, the error margin amounts to 12.25% (with N=64). Percentages given for subgroups within the samples are based on a smaller number of respondents and therefore the margins are larger.

The precision margin should be interpreted as follows: 30% (19 out of 64) of all respondents mention to be very experienced in working with the OEPM with a margin of 11.2%. This means that the interval between 18.2% and 41.2% encloses the population value with a certainty of 95%.

margin

NOMOGRAM 95% reliability



2 Evaluation on general aspects

All respondents were asked to answer some general questions about OEPM search services.

2.1 General background of the respondents

To be able to categorise the respondents they are asked some questions about their position within the organisation (table 3.1 and table 3.2) and their level of experience with the OEPM search services (table 3.3).

Less than one-fifth of the applicants who responded in this study is working in the developmental area: they are either inventor (14%) or head of R&D (4%). Some applicants are working in the legal area and have a position as Head of Patents and Licensing (4%), in-house attorney (4%) or head of Legal Department (0%). Also commonly mentioned are senior executive (7%), searcher (7%) and administrative position (11%).

Table 2.1 Position within organisation, applicants.

| Applicants | % |
|---|-----|
| Inventor | 14 |
| Senior executive | 7 |
| Head of R&D | 4 |
| Head of Patents and Licensing | 4 |
| In-house attorney | 4 |
| Searcher | 7 |
| Administrative (secretary, formality officer) | 11 |
| Other ¹ | 50 |
| Total | 100 |

| | |
|-----------------------|----|
| Number of respondents | 28 |
|-----------------------|----|

17% of the attorneys are either partner or director of an attorney's office. A minority mentioned to be working in an administrative position (3%), as head of documentation (3%).

¹ This and other questions has open ended answers and have to be coded. This means that after coding these results will change.

Table 2.2 Position within organisation, attorneys.

| Attorneys | % |
|---|-----|
| Attorney | 14 |
| Attorney and partner\director | 17 |
| Administrative (secretary, formality officer) | 3 |
| Head of Documentation | 3 |
| Searcher | - |
| Other | 64 |
| Total | 100 |
| Number of respondents | 36 |

Table 2.3 summarizes the level of experience of applicants and attorneys with the OEPM search services. 72% of the respondents see themselves as experienced in working with OEPM. In general, attorneys are significantly more experienced than applicants. Almost half of the applicants (47%) claims to be at least 'well experienced' while 91% of the attorneys consider themselves as at least 'well experienced'.

Table 2.3 Level of experience with OEPM search services.

| | Total | Applicants | Attorneys |
|---|-------|------------|-----------|
| | % | % | % |
| 4-Very experienced | 30 | 11 | 44 |
| 3-Well experienced | 42 | 36 | 47 |
| 2-Not so experienced | 22 | 39 | s |
| 1-Not experienced at all in working with OEPM | 5 | 11 | 0 |
| Total | 100 | 100 | 100 |
| Mean* | 3 | 2,5 | 3,4 |
| Number of respondents | 64 | 28 | 36 |

*) Difference between applicants and attorneys is statistically significant.

More than half of the respondents answered positively on the question if their organisation has a separate patents department. In the case of applicants this is 21% and in the case of the attorneys 94%.

2.2 Quality criteria for OEPM search services

The first question with regard to the quality criteria has been designed to get spontaneous reactions from the respondents on what they consider to be key aspects that determine the quality of the OEPM search services. The respondents have been asked to name three criteria they regard to be the most important.

47 of the 64 respondents mentioned at least one criterion the OEPM search services should meet. On average the respondents mentioned 1,3 criteria. On the basis of the answers that were given 8 major quality aspects emerge:

Table 2.4 Criteria the OEPM search services should meet.

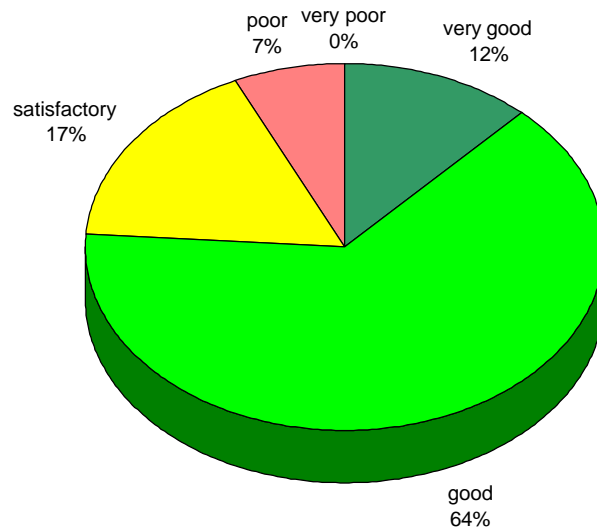
| | Total | Applicants | Attorneys |
|-----------------------|-------|------------|-----------|
| | % | % | % |
| Timeliness | 11 | 10 | 11 |
| Thoroughness | 19 | 15 | 19 |
| Coverage | 4 | - | 7 |
| Clarity | 19 | 35 | 7 |
| Costs | 2 | 5 | - |
| Communication | 6 | 10 | 4 |
| Non Patent Literature | 2 | 5 | - |
| Other ¹ | 62 | 55 | 67 |
| Number of respondents | 47 | 20 | 27 |

If 'Italic' the differences between applicants and attorneys are statistically significant.

2.3 Overall level of satisfaction

All respondents have been asked to rate their overall satisfaction with the OEPM search services over the previous twelve months according to the aforementioned five-point scale. 59 of the 64 were able to give an answer on this question. The majority of the respondents, able to answer the question, is satisfied with the search services OEPM provides. More specifically, 64% considers these services as 'good' and 12% even as 'very good'. According to a large minority of 17% the services are 'satisfactory'. Only a small minority is outspoken negative about OEPM search services: 7% qualifies these services as 'poor' and 0 as 'very poor'. On average, the score given is 3.8 out of 5.

Figure 3 Overall satisfaction with OEPM search services.



There are no significant difference found between the attorneys and the applicants.

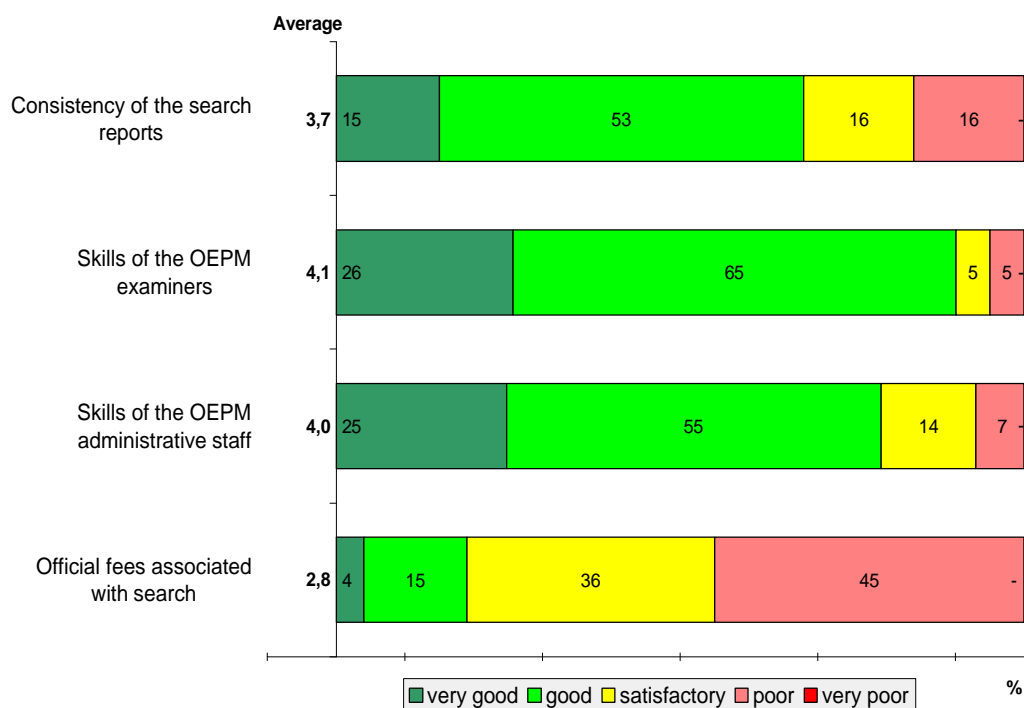
2.4 Satisfaction on general aspects of the OEPM

The satisfaction with the OEPM search services is also measured on a variety of general aspects selected to cover the relevant topics. The respondents are asked to give their opinion on the following aspects:

- Consistency of the search reports
- Skills of the OEPM examiners
- Skills of the OEPM administrative staff
- Official fees associated with search

The results in figure 4 show that these aspects are evaluated mainly positively. The overall picture is that the attorneys are more satisfied with the general aspects of the OEPM than the applicants. As could be expected, satisfaction levels with the official fees are ranking lowest, but still 25% of the attorneys value these fees at least as good (versus 10% of the applicants).

Figure 4 Satisfaction with aspects of the OEPM.



2.5 Satisfaction on specific aspects concerning search services

The respondents were first asked their opinion on an aspect over the previous 12 months and subsequently, if they had indicated to have the specific file at hand, their opinion on that aspect in relation to the specific file.

First now the results concerning respondent's opinion over the last 12 months are shown.

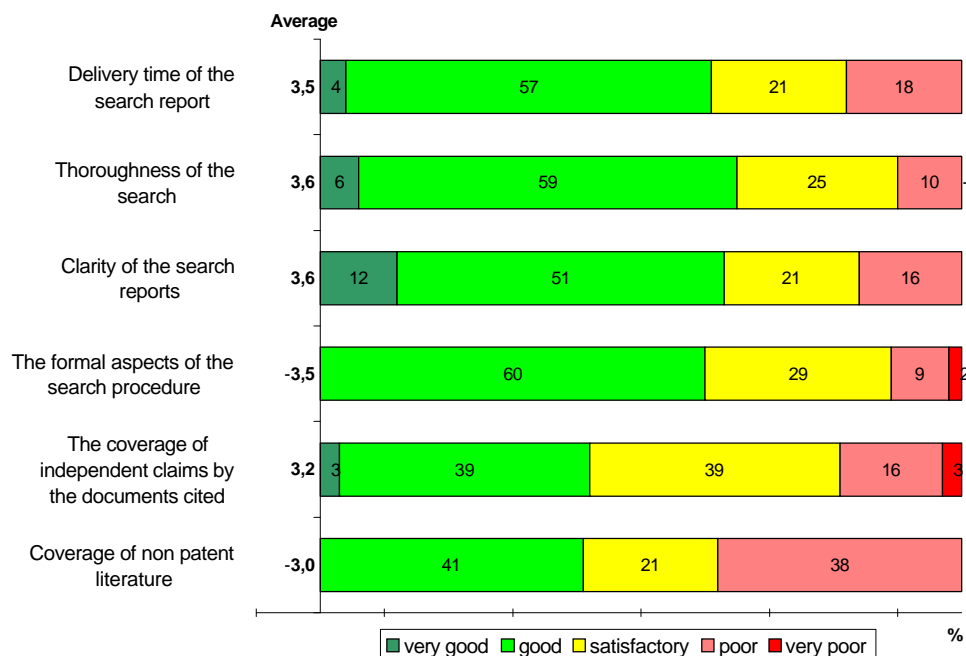
The respondents rated the following aspects:

- Delivery time of the search report
- Thoroughness of the search
- Clarity of the search reports
- The formal aspects of the search procedure
- The coverage of independent claims by the documents cited
- The coverage of non patent literature

Figure 5 shows the satisfaction on the OEPM search services. The respondents are most satisfied with the 'thoroughness of the search' (65% at least good) and 'clarity of the search reports' (63% at least good). More than one third of the respondents (38%) is dissatisfied with the 'coverage of non patent literature'.

The attorneys are on all aspects more satisfied than the applicants. On the 'formal aspects of the search procedure' and the 'clarity of the search report' the differences are significant.

Figure 5 Satisfaction with specific aspects of OEPM search services.



2.6 Satisfaction on communication aspects

Next, the respondents were asked to give their feedback on aspects of the OEPM communications. The following aspects have been evaluated:

- How would you rate the contact with the OEPM examiner?
- Overall satisfaction with the customer services at the OEPM
- The accessibility of the customer services at the OEPM

All the respondents were asked to evaluate the contact with the OEPM examiner. The contact with the OEPM examiner is evaluated with 3,6. None of the respondents answered the question on OEPM customer services.

From all the respondents 63% would like to be able to contact the OEPM examiner between the moment of application and the search report. It's mostly the applicants who feel this need, 75% of the applicants would like the possibility to contact the OEPM examiner versus 53% of the attorneys.

3 Evaluation on specific search files

3.1 Satisfaction of specific prior art searches on specific dossiers

The respondents were first asked their opinion on an aspect over the previous 12 months and subsequently, if they had indicated to have the specific file at hand, their opinion on that aspect in relation to the specific file.

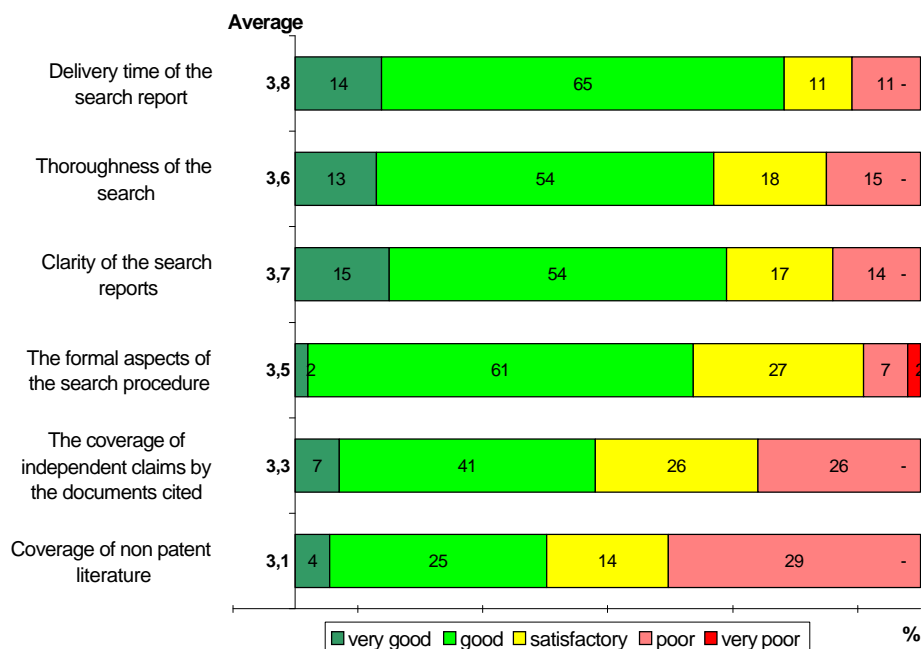
In a next series they were asked questions that can only be answered on the specific search file, of course only if they had earlier indicated that they were prepared to answer questions on the specific file. 61% of the attorneys and 39% of the applicants is able to evaluate specific dossiers.

With respect to the individual dossiers, differences between applicants and attorneys are more common and as a whole bigger. In general the attorneys seem more satisfied than the applicants do.

The following aspects show significant differences between applicants and attorneys:

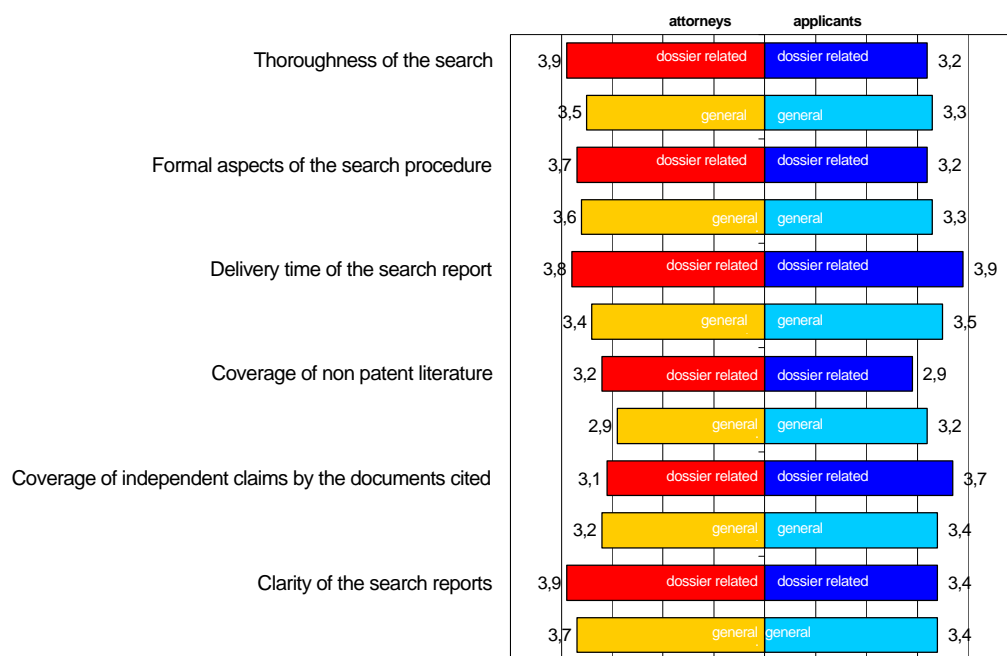
- The coverage of independent claims by the documents cited
- Relevance of the documents to the respective claims
- Specific coverage of novelty
- Understanding by the search examiner of the applications
- The formal aspects of the search procedure
- Thoroughness of the search
- Clarity of the search reports

Figure 7 Satisfaction with specific aspects of the specific file



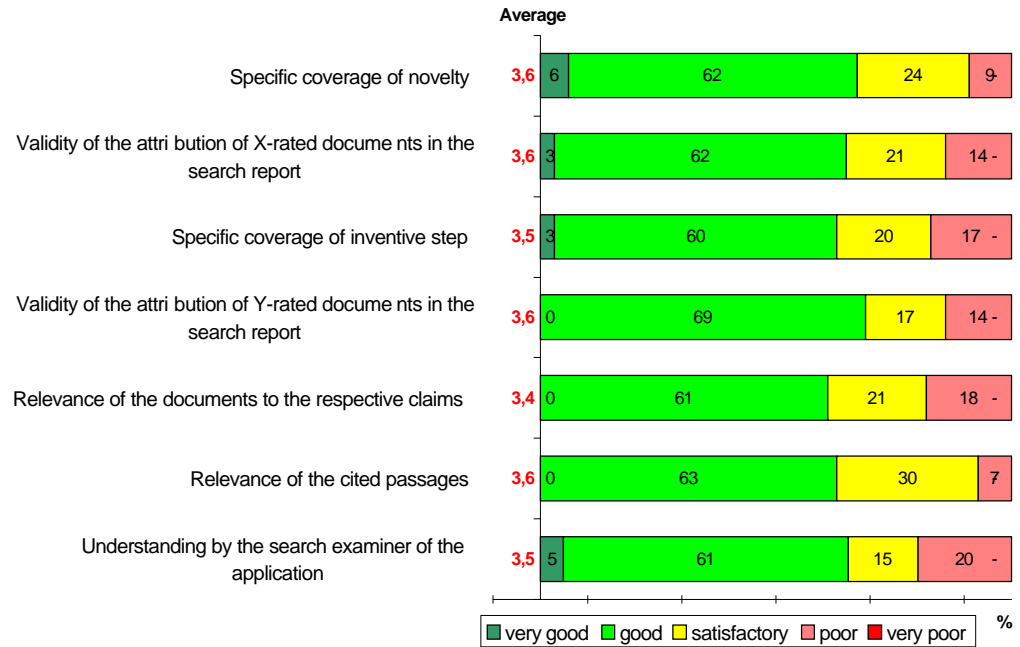
As can be seen in the following figure, differences between general and dossier related evaluations are marginal. As a whole, it seems that dossier related evaluations tend to be slightly higher than general ones. This should be concluded with care, since there is a possibility that these figures have influenced each other to a high extent.

Figure 8 Differences between applicants and attorneys and between general and dossier related evaluations.



Next, specific aspects that could only be rated on the basis of the specific search file are shown.

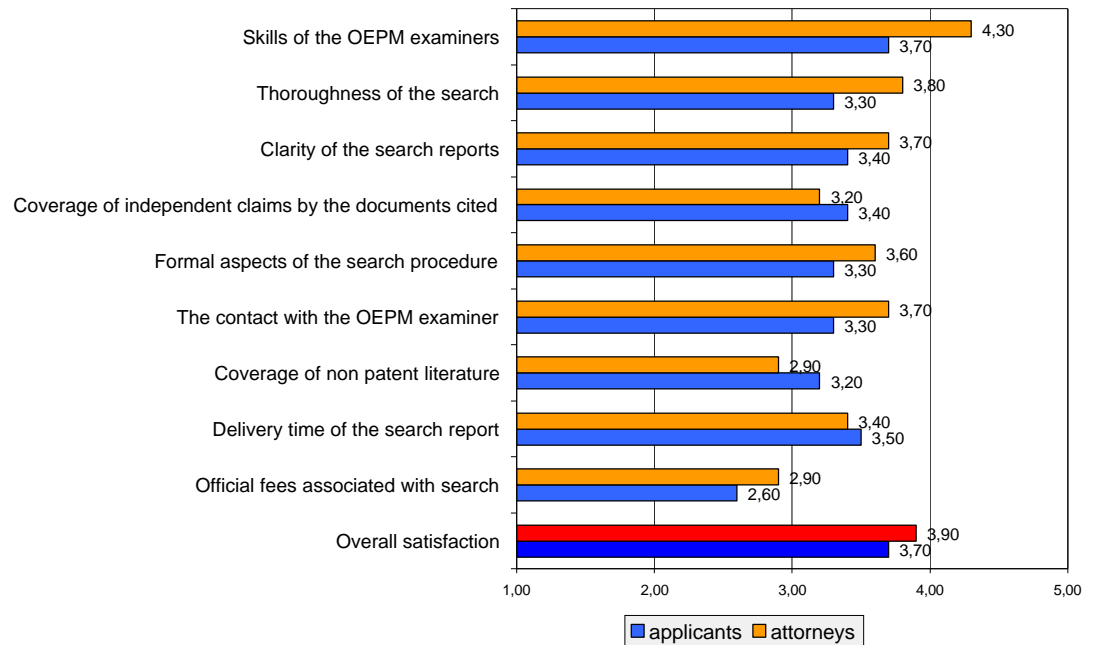
Figure 9 Satisfaction with specific aspects related to the search report.



4 Differences between applicants and attorneys: an overview

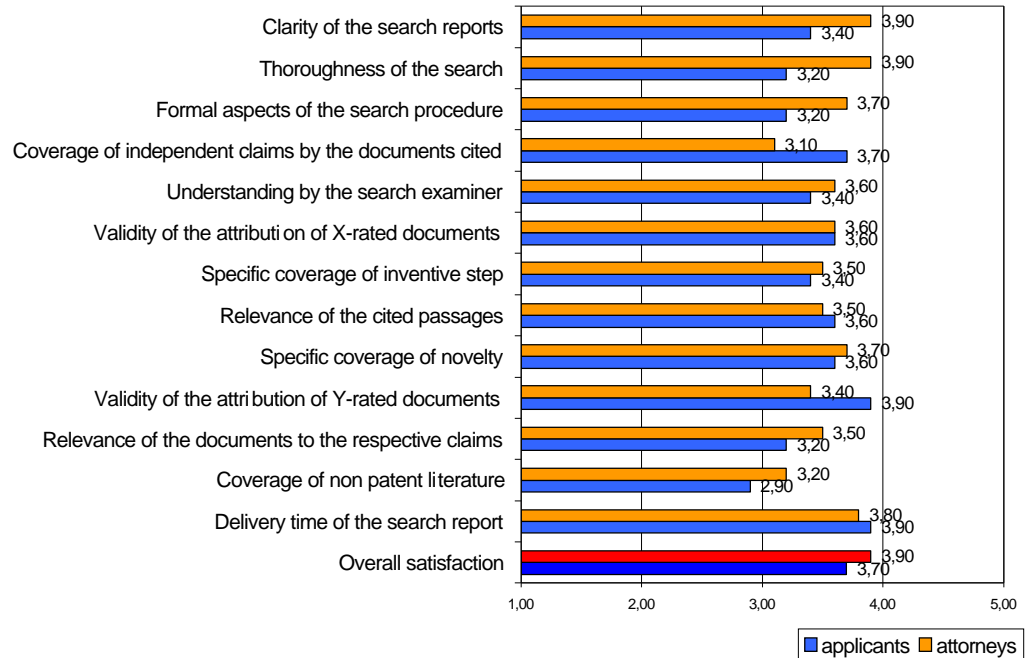
The difference in overall satisfaction (3.9 for attorneys, 3.7 for applicants) is not significant, so it is valid to say that applicants and attorneys are on a general level, equally satisfied with the search services provided by the OEPM. In figure 10 for all general aspects the average scores for applicants and attorneys are shown.

Figure 10 Differences between applicants and attorneys on general aspects



As can be seen in the figure above, no differences can be detected in the "Delivery times" and as already mentioned in the 'overall satisfaction'. On all other aspects there are significant differences.

Figure 11 Differences between applicants and attorneys on dossier related aspects



With respect to the individual dossiers, differences between applicants and attorneys are more common and as a whole bigger. In general, as with dossier related aspects, attorneys seem more satisfied than applicants.

The following aspects show significant differences between applicants and attorneys. In these aspects, attorneys show the highest scores.

- Relevance of the documents to the respective claims
- The formal aspects of the search procedure
- Thoroughness of the search
- Clarity of the search reports

In the following aspects the applicants show the highest scores.

- Coverage of independent claims by the documents cited
- Validity of the attribution of Y-rated documents

5 Relation between general satisfaction and satisfaction on aspects

The general satisfaction with the OEPM services is determined by a number of different aspects. The satisfaction with these individual aspects has been described in paragraphs 3.4, 3.5, 3.6 and 4.1. In this paragraph the relation between these aspects and overall satisfaction is being examined.

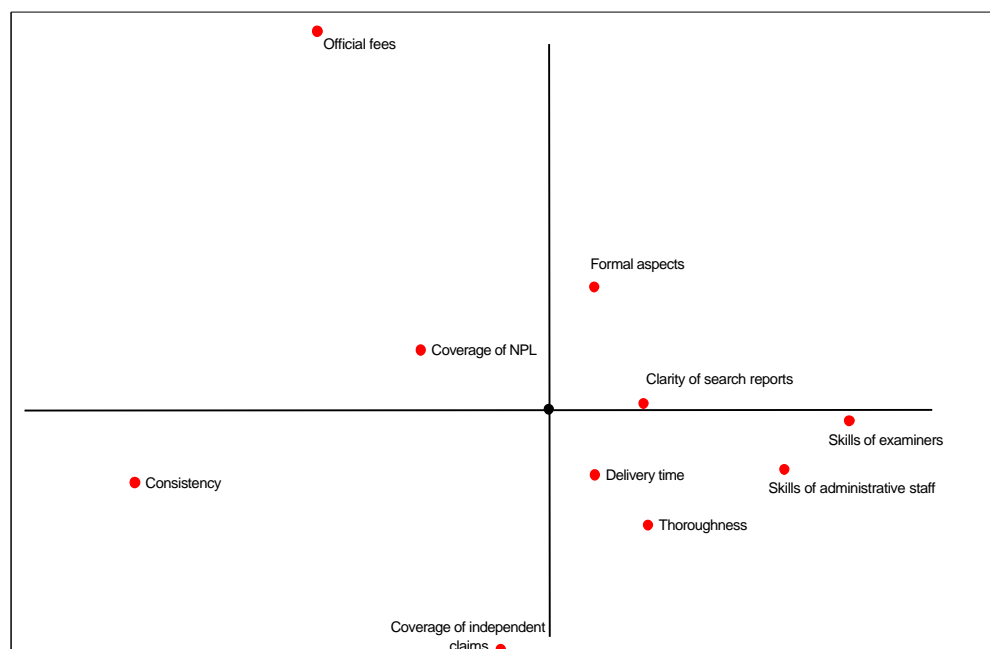
It is interesting to see to what extent satisfaction on individual issues attribute to this overall level of satisfaction. In order to assess this issue, a correlation analysis has been conducted. The aspects in the questionnaire have all been correlated with the general level of satisfaction.

When we plot these correlations against the various levels of satisfaction, a so-called priority matrix emerges. In such a matrix we can distinguish 4 groups of aspects:

- aspects that show high importance and a high level of satisfaction
- aspects that show high importance and a low level of satisfaction: improvement on these aspects should result in a higher level of satisfaction
- aspects that show low importance and a high level of satisfaction:
- aspects that show low importance and a low level of satisfaction: improvement on these aspects probably will not result in a higher level of satisfaction

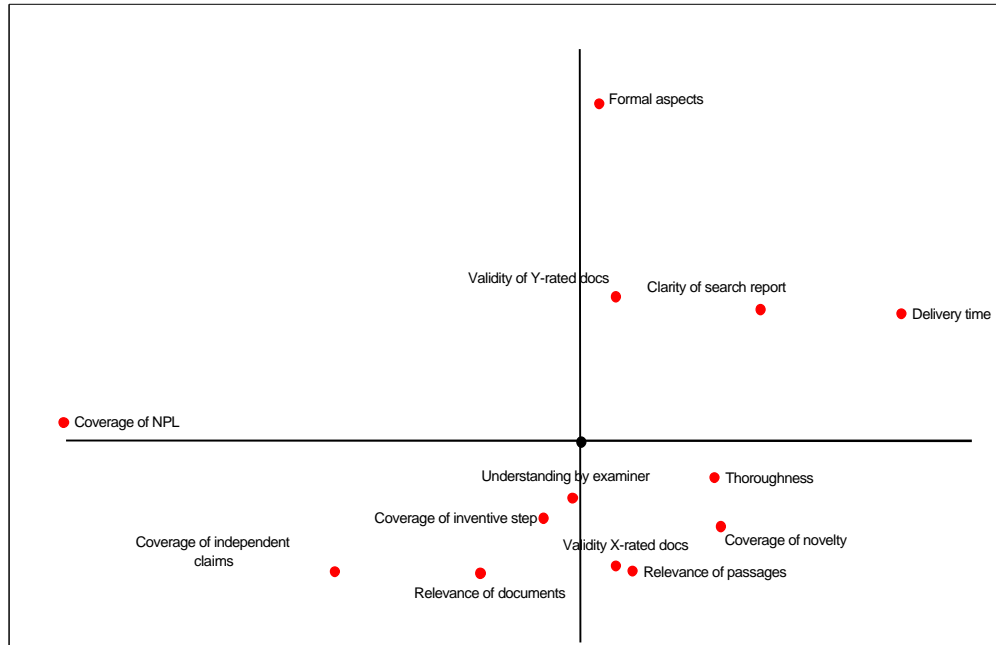
The figures 12 and 13 show the relation between the general aspects and the overall level of satisfaction for applicants and attorneys.

Figure 12 Relation between satisfaction with general aspects (x-axis) and correlation overall satisfaction (y-axis) – all respondents.



Since the number of respondents is low, these figures should be considered with care.

Figure 13 Relation between satisfaction with dossier related aspects (x-axis) and correlation overall satisfaction (y-axis) – all respondents.



As can be seen in the above figure, formal aspects, delivery time, validity of Y-rated documents and the clarity of the search report are evaluated positively and are considered important. On the other hand, improvement in Coverage of Non Patent Literature is expected to result in a higher level of overall satisfaction. Likewise for Official fees (Figure 12).

6 Additional comments

6.1 PCT procedure

With regard to PCT (Patent Co-operation Treaty) the respondents have been asked to give their opinion. 86% of all respondents indicate that the PCT Applications have advantages or disadvantages.²

More than half of the respondents (58%) is aware about the practice that the EPO issues a supplementary European search for certain PCT-applications. (Though this question relates more to EPO search services, the answers gives an impression of the respondents' awareness of partnership PCT procedures)

6.2 Community Patent

The intention to introduce the 'Community Patent' – offering patent rights for all EU member states from one application – is known to 88% of the respondents (56 respondents). 79% of the applicants and 94% of the attorneys are aware of this intention.

6.3 Documents cited

A question asked to all respondents is whether one finds the number of documents cited in the search report over the past 12 months satisfactory. Most of the respondents (72%) reacted positively to this question. The respondents who where dissatisfied were mainly so because they considered the number of documents to be too few.

6.4 Improvements

Finally respondents were asked on which aspects the search services could be further improved. Most mentioned is 'Clarity of search report' suggested by 30% of the respondents (38% of the applicants and 11% of the attorneys). The most important differences between the applicants and the attorneys are that the applicants would like to see more improvements of the 'Delivery time' and 'clarity of search report'. Attorneys would like to see more improvements of 'communications with search examiners', 'Consistency of search report' and 'full coverage of inventions by total number of quoted documents'. 7.2 shows the differences between the applicants and the attorneys.

² Full information will only be available after coding

Table 7.1 Possible improvements of the OEPM

| | Total | Applicants | Attorneys |
|---|-------|------------|-----------|
| | % | % | % |
| Delivery time of search report | 20 | 23 | 11 |
| Communications with search examiners | 20 | 8 | 33 |
| Thoroughness of search report | 10 | 8 | 11 |
| Coverage of non-patent literature | - | - | - |
| Clarity of search report | 30 | 38 | 11 |
| Costs associated with search | - | - | - |
| Communication with the administrative staff | 10 | 15 | - |
| Consistency of search report | 10 | - | 22 |
| OEPM Customer Service | 5 | 8 | - |
| Clarity of search procedure | 5 | 8 | - |
| Full coverage of inventions by total number of quoted documents | 5 | - | 11 |
| Relevance of the documents to claim | 5 | 8 | 0 |
| Level of bureaucracy | 15 | 15 | 11 |
| Number of respondents | 20 | 13 | 9 |

If 'Italic' the differences between applicants and attorneys are statistically significant.

7 Conclusions

Feedback on overall quality

Five major quality aspects emerged, regardless of the respondent's characteristics (country of origin, attorney, applicant etc.). The most important aspect of quality to be satisfied in this survey is Clarity of the search report. This answer alone shows that search is not seen simply as some sort of bureaucratic requirement to be met in order to be able to continue with the patenting procedure. It's result is a valuable and important basis for further decision to applicants and attorneys in its own right.

The overall satisfaction level of search services of the OEPM in the sectors Electrical Machines, Human Necessities, Audio & Video Media, Electronics and Computers was labelled as *Agood* or *Avery good* by the majority of respondents that expressed an opinion (76%). The survey was able to indicate where criticism exists and to explain why such criticism was made, which will, hopefully, help the OEPM improve search services in these sectors.

General conclusions

The original approach developed by the EPO and ITM Research during the pilot study to identify and explain differences in user satisfaction levels between industrial sectors has been confirmed further by this survey. Results were consistent with the other surveys, and consistency within the survey itself appeared good. Warning potential respondents in advance about the survey, and informing them of the file about which questions would be asked, was a success.

Judging by the still relatively high response rates after already conducting quite a few surveys, there is still a willingness from the users to participate, which proves the interest/importance attached to these types of surveys for the users.

Hopefully the issues raised in this report will form the basis of discussions within OEPM search that will help the organisation further improve its search reputation.

Appendix

List of reference

Until now surveys have been conducted in the following industrial sectors:

- "Computers" and "Telecommunications" – conducted by NIPO of Amsterdam
- "Human necessities" – conducted by NIPO of Amsterdam
- "Optics and Electronics" – conducted by NIPO of Amsterdam
- "Textile & Printing Machines" and "Textile, Paper, Leather & Photography" – conducted by NIPO of Amsterdam
- "Electronics and Optics" – conducted by NIPO of Amsterdam
- "Engines, Pumps and Thermodynamics" and "Vehicles and General Technology" – conducted by NIPO of Amsterdam
- "Organic Chemistry and Polymers" – conducted by NIPO of Amsterdam
- "Conveying and Materials" – conducted by NIPO of Amsterdam
- "Inorganic Chemistry and Industrial Chemistry" – conducted by NIPO of Amsterdam
- "Biotechnology" – conducted by ITM Research
- "Electrical machines" – conducted by ITM Research