FOI Release
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Title: Patent search quality

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Information request:
Would you please provide details of any benchmarking studies that you have conducted as to the quality of UKIPO patent searches (e.g. patent search quality assessment programme).

In particular, I should like to understand how the study was completed and the results of the or any benchmarking exercise (for example, number of X citations on UKIPO searches as compared to searches on corresponding EP and/or PCT applications; relevance of X citations on UKIPO searches as compared to searches on corresponding EP and/or PCT applications; identicality of X citations comparing UKIPO and EP/PCT searches).

Information released:
The only ongoing benchmarking that we carry out is the comparison of IPO searches against equivalent EPO searches, as we now use the same patent classification (CPC), the same search software (EPOQUE) as EPO and we have access to most of the patent and NPL databases that EPO have access to. We only benchmark searches on corresponding PCT applications where EPO was the International Search Authority. Unfortunately we do not have statistics of identicality of X citations between IPO and EPO searches as for quality purposes we are primarily interested in the differences so we can learn from them.
I therefore attach details of the modus operandi and statistics for the 2 types of IPO/EPO search comparison that we carry out.

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Benchmarking of GB patent searches versus EPO patent searches

For some time the Intellectual Property Office (IPO) has used the same basic patent search software and database as EPO (EPOQUE) and also has used the same patent classification (CPC and prior to that ECLA). In view of this it was recognised that it would be valuable to benchmark GB searches against those of EPO both to check that our quality was broadly comparable and also to enable us to learn lessons where the quality of the EPO search was better.

There are 2 ongoing procedures for benchmarking GB searches against EPO searches:

1. Search comparison during examination

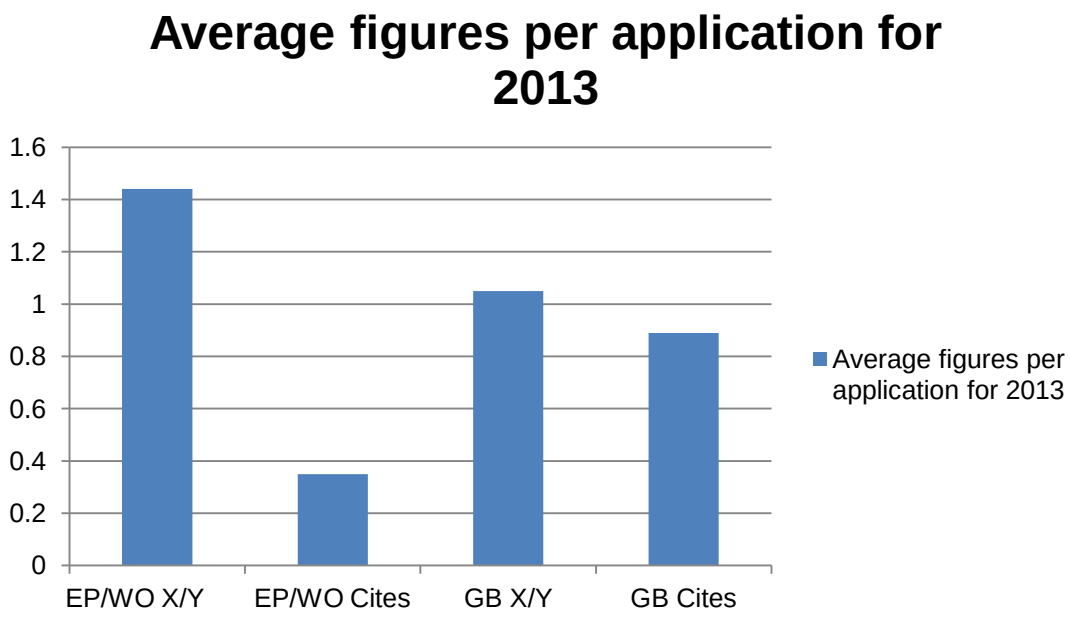
When the GB substantive examiner is carrying out examination of the patent

application and notices that there is an equivalent European Patent, they fill out a form giving the following data:-

- EP/WO X/Y - the number of 'X' or 'Y' category documents listed on the EP or WO search report that were not listed on the GB search report. (This does not include instances where the two search reports have merely cited different members of the same family).
- EP/WO Cites relates to the number of the EP/WO X/Y documents that were subsequently cited at GB substantive examination.
- GB X/Y relates to the number of 'X' or 'Y' category documents listed on the GB search report that were not listed on the EP or WO search report. (This also does not include instances where the two search reports have merely cited different members of the same family).
- GB Cited relates to the average number of the GB X/Y documents that were cited in the GB substantive examination.

The following table gives average figures per application for 2013 so far (144 patent applications):-

EP/WO X/Y	EP/WO Cites	GB X/Y	GB Cites
1.44	0.35	1.05	0.89



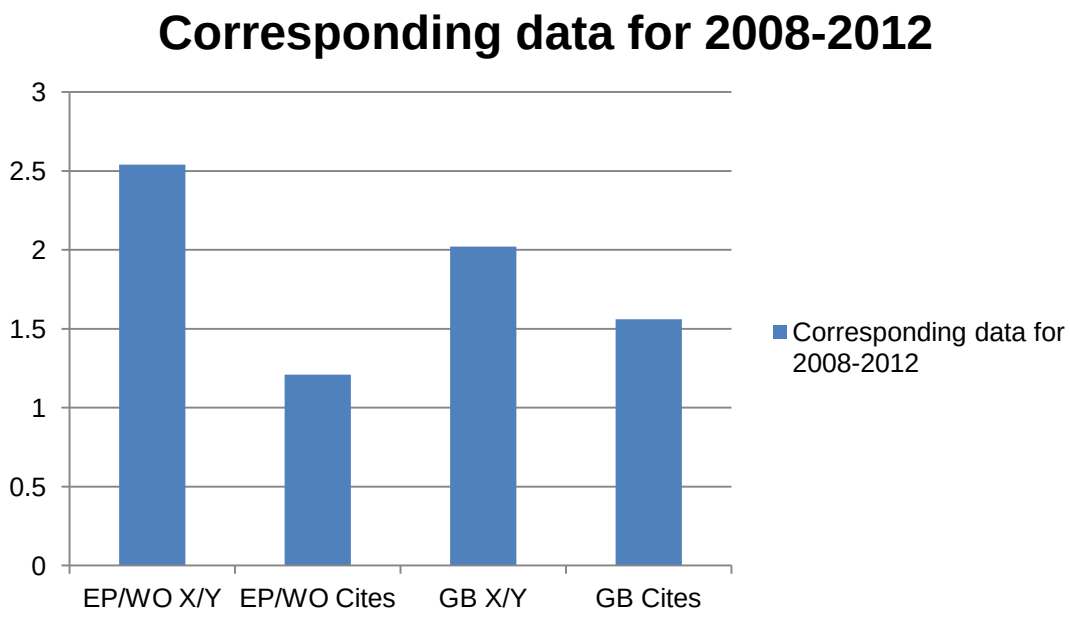
Note that this procedure is not applied where the claims of the GB and EP or WO applications are significantly different as the comparison would be misleading.

Experience has shown that quite often EPO and IPO examiners' citations may be different, but they are of equal weight. In this case, the GB examiner will probably be more likely to cite GB IPO citations because the examiner has more information available to him/her about the IPO citations, particularly from the internal search

report form completed by the search examiner which usually gives some textual indication of the relevance of each citation. There is therefore a slight inbuilt bias towards the IPO examiner citing the IPO citations. Given these statistical considerations, it is at least safe to say that IPO searches of broadly comparable quality to those of EPO.

The following chart gives the corresponding data for 2008-2012 (1471 applications). This shows a remarkable degree of consistency in the proportions of the comparison.

EP/WO X/Y	EP/WO Cites	GB X/Y	GB Cites
2.54	1.21	2.02	1.56



This procedure works well with minimal overhead on the part of the examiner. However, it has the disadvantage that there is no qualitative assessment of how relevant the cited documents actually are. It also has a disadvantage in that during times of large examination backlogs, the searches in question may have taken place 3 to 4 years ago such that advances in searching software and/and classification systems may affect the relevance of the comparison and limit any lessons to be learnt.

With this in mind in 2005, IPO developed a new procedure to run alongside the above. This procedure is capable of comparing GP/EPO pairs which are more recent (6 to 18 months from search date at comparison).

2. Quality Assurance – Search Comparison

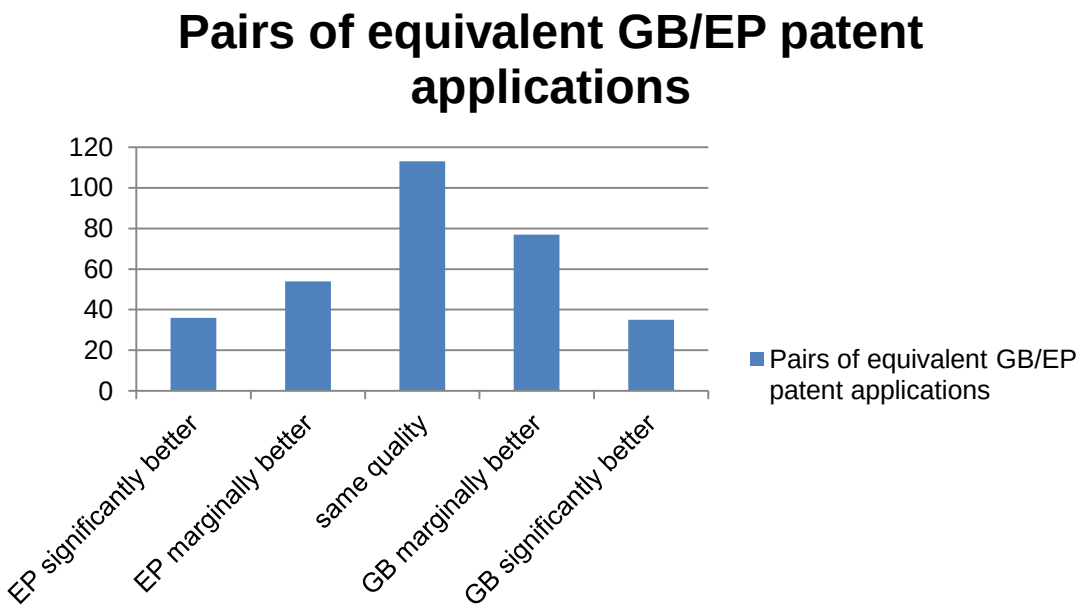
This QA procedure uses an EPOQUE preparation (computer script) to find pairs of equivalent GB/EP patent applications for which there are both EPO and GB search results.

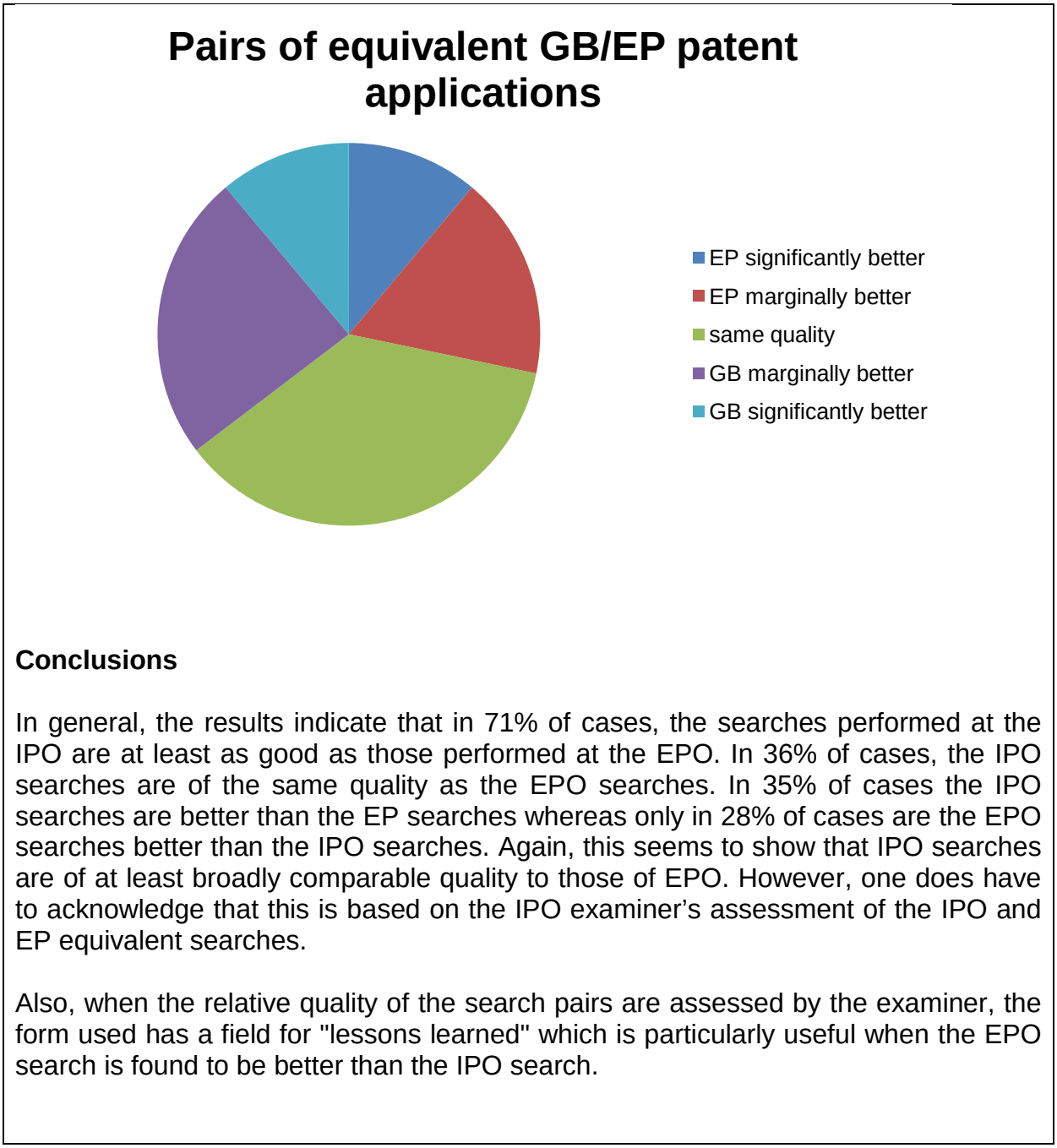
An EPOQUE preparation is run about once every three to six months to identify suitable pairs of EP/GB applications. Suitable cases are sent to the relevant examining group for assessment as regards the relative quality of the searches either by the Deputy Director, or by a suitably expert subclass examiner. The results of the assessment are recorded on a form and collated as below.

Results

The results to date are shown below in both tabulated and graphical form:

EP significantly better	EP marginally better	same quality	GB marginally better	GB significantly better
36 (11%)	54 (17%)	113 (36%)	77 (24%)	35 (11%)





Conclusions

In general, the results indicate that in 71% of cases, the searches performed at the IPO are at least as good as those performed at the EPO. In 36% of cases, the IPO searches are of the same quality as the EPO searches. In 35% of cases the IPO searches are better than the EP searches whereas only in 28% of cases are the EPO searches better than the IPO searches. Again, this seems to show that IPO searches are of at least broadly comparable quality to those of EPO. However, one does have to acknowledge that this is based on the IPO examiner's assessment of the IPO and EP equivalent searches.

Also, when the relative quality of the search pairs are assessed by the examiner, the form used has a field for "lessons learned" which is particularly useful when the EPO search is found to be better than the IPO search.