

Good enough?

A discussion paper about Patent Quality at the EPO

Local Staff Committee Munich (LSC Munich)

Local Staff Committee Berlin (LSC Berlin)

April 2018

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“you cannot turn the conveyor belt faster every year”

“Honesty and a sober and realistic approach by EPO management would be needed to really improve quality and to bring the EPO closer to its vision.”

Kluwer Patent Blog

“US problems with low-quality patents and rampant patent litigation is driven by inadequate scrutiny of patents”

Arstechnica

Summary

The EPO strives to set worldwide standards in quality. For years, the EPO held the “Golden Standard” in patent quality, the quality of search and examination outcomes. Today, many examiners tell us that they feel that patent quality has deteriorated in recent years. **With this paper, staff representation hopes to initiate a new and open discussion about patent quality at the EPO.**

We argue in this paper that management policies of recent years, which were mainly directed towards increasing timeliness, productivity and efficiency, have had numerous negative effects on patent quality. In particular, we argue that:

1. patent examiners do not have enough time anymore to do their job,
2. career incentives (steps, promotions, bonuses) are too heavily based on short term production targets and neglect patent quality,
3. a non-transparent and authoritarian management style jeopardizes work ethic and esprit de corps – the personal pride which examiner take in the quality of their work,
4. examiners are increasingly requested to treat files outside their technical field of expertise without appropriate training,
5. patent quality indicators produced by Directorate Quality Audit (DQA) are not reliable,
6. CASE is not suitable to measure patent quality,
7. the astonishing increase of the grant rate from 50% to 70% should be carefully analysed,
8. the EPO is increasingly criticized by patent professionals,
9. the working conditions for examiners and especially newcomers are deteriorating, and
10. patent quality might worsen even further because the EPO has stopped investing in the future (e.g., classification, examiner training).

We base our assessment of the current state of patent quality at the EPO mainly on **discussions with examiners**. We think that their accumulated experience over the years and their direct everyday involvement in the patent granting process allows them to have an informed view on what is happening at the EPO. Staff representation is in a unique position in that examiners can speak openly with us. We also use statistical data from internal and external sources, scientific work from various scholars in IP related fields, and media reports in newspapers and online blogs as a basis for our arguments.

With this paper, we hope to initiate a new discussion about patent quality at the EPO. We invite everybody to participate: patent quality is indeed a very fascinating topic because

of its many facets and importance for the future of the EPO and its staff. And we all know that patents of bad quality have a detrimental effect on technological innovation, and open the door to patent trolls instead of fostering economic growth.

We propose a common approach in addressing all the arguments by the management, staff, external stakeholders and the public. An active participation of all interested parties will contribute to a setting in which trust can be built, objectives can be shared and engagement can be fostered. **A crucial ingredient for reaching quality in any organisation is engaged and motivated people who share the same values.** Transparency contributes to remove prejudice and mystification; false assumptions can be rectified. And most importantly, jointly agreed upon and new, innovative and sustainable policies for maintaining and improving patent quality can be found, from which **everybody will benefit.**

Staff representation is sometimes accused of damaging the reputation of the EPO and to undermine the trust of the users towards the EPO by its criticisms and its publications. On the contrary, we think that by openly confronting all arguments about patent quality, by inviting and involving critical voices, by allowing for a transparent feedback cycle, the EPO will build up an even better reputation, as well as more trust and more respect amongst its stakeholders. In a world dominated by marketing slogans and high quality brochures which always carefully avoid mentioning any shortcomings, an organisation which has the courage to conduct a continuous and open debate about fundamental topics, such as patent quality, will stand out. **Embracing and actively reacting to one's harshest critics is the best strategy to scrutinize one's opinions and to prepare successful strategies for the future.**

We are looking forward to a fruitful and passionate discussion!

We made every effort to provide complete and accurate information. However, should you find any errors or have comments, suggestions or counter-arguments: please get in touch with us (msc@epo.org). The more feedback the better!

Local Staff Committee Munich

(LSC Munich)

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1 What's happened so far?

The discussion about patent quality reached a new peak¹ in March 2017 during a meeting of the administrative council². The president of the EPO stated that he was aware that quality was very difficult to define, however,

“objective measurements suggest[ed] that quality and robustness of a patent had improved since 2010.”

During the same meeting, staff representatives warned that there is no longer enough time available for examiners to determine the relevant prior art and that many patents are granted which should never have been granted. They also warned that management increasingly interfered in the examining division's work; hence concerns of partiality and undue influence to the work of the examining division were arising. The day after, EPO management posted the following announcement on the intranet³:

Attack on quality delivered by EPO staff

17.03.2017 - **Staff Representation criticizes EPO quality during Administrative Council**

Dear colleagues,

We have the duty to inform you that yesterday when the Administrative Council was discussing the progress report of the Unitary Patent Protection, the **staff representatives took this opportunity to attack publicly again**, in front of all Member States' delegates and the user representatives, **the quality of the products delivered by EPO staff, without any evidence but unfounded allegations**.

Although all objective indicators, supported by regular internal and external audits and user surveys, have demonstrated that EPO quality has increased over the last years, these attacks are repeated publicly. It shows a total lack of respect for the colleagues who have shown by their efforts and professionalism the capacity of the Office to improve the quality of the products and services of the Office.

The staff representation has the right to criticize any aspect of the management of the Office if they so wish. The staff has the right to know what its representatives say about its work.

¹ It is not the first time that EPO staff do not share the views about patent quality of their management. Already in a survey conducted in 2004, more than ¾ of 1,300 examiners agreed that the productivity demands from the managers did not allow them "to enforce the quality standards set by the EPC". In addition 90% said that they did not have time to keep up to date with advances in their scientific fields. In a second survey of 730 examiners, conducted by the EPO itself, only 9% said that they believed that the management was "actively involved in improving quality", Abbott, A. (2004). Pressured staff "lose faith" in patent quality. Nature, 493. Retrieved from <http://www.nature.com/nature/journal/v429/n6991/full/429493a.html?foxtrotcallback=true>,

² Minutes of the 151st meeting of the Administrative Council (15./16.03 2017), CA/36/17, points 53 and 97, available in Micado, <http://main23.internal.epo.org/micado>

³ Attack on quality delivered by EPO staff, 17.03.2017, Announcement on the EPO Intranet

Quality = Productivity?

It is worth mentioning that the management seems to have produced its own quality indicators. An announcement by former VP Minnoye suggested that productivity and quality are directly linked. The better the productivity, the better the quality must be. If an examiner works on many files (high productivity), he will have learned from these many files, gained a lot of experience and hence the quality of his work must have improved.

“Productivity and quality are sometimes seen as contradictory in the patent world: high productivity would not be possible without lowering quality, and vice versa. This is simply wrong. It is in fact even more generally accepted that quality gets better as experience grows: step by step one becomes more efficient and the outcome of the work done is generally more valuable. An even more accepted principle is that experience can only be achieved by doing. Our personal abilities quite simply improve with time and this bears fruit: we work more effectively, learn from our mistakes and take faster decisions. Productivity and quality go hand in hand.”⁴

Then, in April 2017, the “Friseursalon”⁵ case became public.

2 What is Patent Quality?

Let us take a step back and define what exactly we are talking about. The concept of “quality” in general has many different facets and its definition depends on the perspective of the beholder. In the patent world, it goes from spelling errors in official communications to identifying the most relevant prior art, from assuring a speedy procedure to providing a competent and thorough analysis of an application.

Patent Quality equals satisfying the requirements of the EPC

One way of defining patent quality is the following:

“Patent quality encompasses two concepts – (one hard:) avoiding legal mistakes in issuing (or declining to issue) a patent, and (one really hard:) ensuring that society is better off in granting rather than denying a patent.”¹⁷

⁴ EPO Quality, Something to be proud of, 27.09.2016, Announcement on the EPO intranet, http://my.internal.epo.org/portal/private/epo/organisation/dg1/?WCM_GLOBAL_CONTEXT=/epo/intranet/organisation/dg1/vp1_org/announcements/2016/1474989979065_quality

⁵ A widely-discussed recently granted patent (also known as a container with window) which does not comply with quality standards. According to numerous examiners with whom we have spoken, this is not at all an isolated case but only one among many.

We will use this definition in this paper and consider patent quality as being based on the requirements of the EPC concerning patentability. We assume that a high patent quality is achieved if the relevant prior art is identified, novelty and inventive step is analysed according to the EPC, and all the other requirements of the EPC are fulfilled. We will ignore the really hard concept of ensuring that society is better off when a certain patent is granted; although very interesting, it goes beyond the subject matter of this paper.

Getting Patent Quality right is a difficult task

Examining a patent and deciding whether an invention already exists or is obvious from the perspective of a skilled person in the field is a challenging task. The examiner⁶ has to consider an ever-growing corpus of technological information which has to be searched and has to keep up-to-date in ultra-fast moving technological fields which continually produce new and complex technological concepts. There is also the question about inventive step, and sometimes the examiner encounters grey areas in the definition of what is patentable and what is excluded. Already Thomas Jefferson struggled with it, writing in 1813: "I know well the difficulty of drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not."

Procedural efficiency is also important

An additional concept has to be considered: procedural efficiency of the patent granting process. It includes organisational and financial aspects, and assuring certain pragmatism in doing things without which no system can run. Theoretically, an examiner could spend an infinite amount of time in looking for prior art and discussing inventive step, clarity issues, etc. However, time and financial resources are limited. Therefore, a patent office's management must carefully balance processing speed, cost and human resource constraints. For example, the fees for getting a patent application processed and the speed of processing should be reasonable⁷.

⁶ It should be noted that the EPC requires a decision on patentability being taken collectively by a three members division (see Articles. 15, 18, 19 EPC). This is in contrast to, for example, the US system and the German system, where a single examiner takes a decision alone. At the EPO, one division member, the entrusted examiner, is primarily in charge and has the task to bring the case forward until it can be presented to the other members and can be collectively decided upon. In the following, whenever we refer to an examiner, we mean the entrusted examiner.

⁷ It is also worth observing that it is also not always clear if getting patent quality right or even perfect is worth the effort - many and perhaps most patents are economically worthless and will do no harm, see paper in footnote 8.



The patent granting process should

- assure patent quality by satisfying the requirements of the EPC
- and be efficient.

EPO focuses on Procedural Efficiency and neglects Patent Quality

It is the current balance at the EPO between patent quality and procedural efficiency which is criticized by staff representation. EPO management introduced policies concerning procedural efficiency without taking sufficient care of their impact on patent quality. Many factors contributed to the astonishing gains in procedural efficiency in recent years (an increase of 23% in the number of products in comparison to 2014, see Figure 3). For example, new and allegedly better search tools and databases or an increased human resource allocation to the core business of the EPO, the search and examination procedures, just to mention a few. However, the lion share, in our view, came at the expense of the time an examiner has at his/her disposal for working on each patent application. Ever rising production targets for individual examiners resulted in an examiner today having to do much more work in the same amount of time than a few years ago.

Incentives stacked in favour of granting a patent

Keeping an eye on patent quality is especially important, as from a larger perspective it can be observed that incentives in the patent system are stacked in favour of a patent being granted. Patent lawyers are paid for getting patents granted and not for receiving refusals. The EPO and the member states profit much more in financial terms from a grant than they do from refusals (renewal fees). Furthermore, negative impacts of granted patents with low quality will only come to light years after these patents have been granted. Hence, it may be tempting to push for more grants and neglect the long term negative consequences on the European economy of patents of low patent quality.

Patent Quality is difficult to measure

The one big problem about patent quality is that it is very difficult to objectively measure it. There is no consistent definition of and much less any consensus about the way of measuring patent quality. Hence, the best we can do is to carefully study known factors which might influence patent quality and invite all the parties involved to a new, objective and open discussion.

Quality issues as a wake-up call

One positive effect about the announcement “Attack on quality delivered by EPO staff”³, which has been cited at the beginning of this paper, and the internal discussion about a few well known recently granted patents which should never have been granted, is that today managers seem more concerned about patent quality than in the past. From many directors, we heard that they very much fear similar cases in their own directorate.

Indeed, these patents should be taken as a wake-up call, a warning that the EPO measures to safeguard patent quality might be insufficient and that the recently introduced policies concerning procedural efficiency have a negative impact on patent quality.

... mais, à part ça, Madame la Marquise, tout va très bien !

Staff representation is sometimes accused of damaging the reputation of the EPO and to undermining the trust of the users towards the EPO by its criticisms and its publications. On the contrary, we think that by openly confronting all arguments about patent quality, by inviting and involving the harshest critics, by allowing for a transparent feedback cycle, the EPO will build up a better reputation, more trust and more respect amongst its stakeholders and the public. In a world dominated by marketing slogans and high quality brochures which always carefully avoid mentioning any shortcomings, an organisation which has the courage to conduct a continuous and open debate about fundamental issues, such as patent quality, will stand out. And after all: what better strategy exists for preparing for future challenges, than by embracing and actively reacting to one's critics?

A new, objective and open discussion on patent quality

With this paper, we hope to initiate a new discussion about patent quality at the EPO. We invite everybody to participate as it is indeed a very fascinating topic, because of its many facets, and of course because of its importance for the future of the EPO and its staff. And we all know that patents of bad quality have a detrimental effect on technological innovation, and open the door to patent trolls instead of fostering economic growth.

We propose a common approach in addressing all the arguments by the management, staff, external stakeholders and the public. By an active participation of all interested parties, trust will be built, objectives will be shared and engagement will be fostered. A crucial ingredient for reaching quality in any organisation is engaged and motivated people. Transparency on the subject will contribute to removing prejudice and mystification; false assumptions can be rectified. And more importantly, jointly agreed upon and new, innovative and sustainable policies for the EPO can be found, from which everybody will benefit.

Low patent quality hinders technological progress

In 2001 a patent scholar argued in a paper⁸ that spending more money weeding out bad patents didn't make sense: "Very few patents are actually litigated or licensed, most simply sit on a shelf unused." It is an argument in favour of waiting to find out which patents actually matter—and then have the courts litigate whether those patents are actually valid or not.

However, a recent article¹¹ argues that this argument has not aged well. In the US, over the last 17 years, there has been a rise of patent trolls that exploit the vagueness of patents and the high costs of litigation to extort money out of victims who simply cannot afford to vindicate their rights in court. Patent trolling costs the US economy tens of billions of dollars per year⁹. The article argues in favour of allocating more time to the (US) patent examiners and spending more money for weeding out the kind of patents that have fuelled the troll boom. Also another paper argues in favour of allocating more time to US patent examiners¹⁰. In the US, patent trolls are reported to particularly like patents granted by "lenient" examiners, i.e., by examiners which demand the fewest changes to patent claims^{11,12}.

Good patent quality is worth the effort

Plenty of anecdotal evidence exists about granted patents with low quality which had detrimental effects on small companies and innovation. One example is a 17 year old EP patent concerning lamps. German television reported that a German small enterprise (Mittelständler) which had been using the technology disclosed by the patent did not dare to start an invalidity procedure and preferred instead paying license fees for years to the multi-national company owning the patent. An expert argued that the patent should have never been granted because its subject-matter was obvious on its priority date. Only

⁸ Rational Ignorance at the Patent Office, 2001, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=261400

⁹ New study, same authors: patent trolls cost economy \$29 billion yearly, 3.7.2012, <https://arstechnica.com/tech-policy/2012/07/new-study-same-authors-patent-trolls-cost-economy-29-billion-yearly/>

¹⁰ Decreasing the Patent office's Incentives to Grant Invalid Patents, 2017, https://www.brookings.edu/wp-content/uploads/2017/12/es_121317_decreasing_patent_office_incentives_grant_invalid_patents.pdf

¹¹ Why the roots of patent trolling may be in the patent office, 05.03.2018, <https://arstechnica.com/tech-policy/2018/03/why-the-roots-of-patent-trolling-may-be-in-the-patent-office/>

¹² Crafting Intellectual Property Rights: Implications for Patent Assertion Entities, Litigation and Innovation, 2017, <https://scholar.harvard.edu/xavier/publications/who-feeds-trolls-patent-trolls-and-patent-examination-process>

recently has the patent been invalidated because another big player sued¹³. However, this is only one story out of many¹⁴. The bottom line is that good patent quality is worth the effort.

3 Arguments by staff representation

Now that we have identified two major characteristics of the patent granting process, patent quality and procedural efficiency, let us look in more detail at the main points of criticism of staff representation. All our arguments originated from the many discussions staff representatives have had with examiners. Many of them tell us that they are seriously concerned; after all, their professional pride is based on the quality of their work. Decreasing patent quality would also menace their professional future. Staff representation is in a unique position because examiners can speak openly with us without fearing reprisal. It is regrettable that the working atmosphere at the EPO is often not favourable to an objective discussion between managers and staff.

3.1 Examiners do not have enough time to do a proper job

As much as patent examiners are committed to thoroughly examining patent applications, if they do not have enough time at their disposal, there is little they can do to maintain high patent quality.

The less time an examiner has at her/his disposal, the worse Patent Quality will be

Increasingly more examiners tell us that they do not have enough time to carry out a thorough search and examination, and that they see patent applications passing their desks which are granted at a far too early stage. These concerns are also confirmed by a recent survey¹⁵: 70% of the participants feel that they do not have enough time to perform their job correctly, six years ago only 45% felt this way (see Figure 1).

¹³ Sinnloser Patentschutz – Schaden für die Wirtschaft?, ZDF Frontal 21, 24.05.2016, <https://exploredoc.com/doc/9754467/24.05.2016--sinnloser-patentschutz---schaden-f%C3%BCr-die-wirt...>

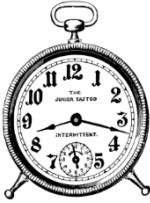
¹⁴ See another publication ¹⁷ for further stories of patents which were used to collect millions in licensing fees but were invalidated at a later point.


¹⁵ Technologia Staff Survey. (2016). Retrieved from https://suepo.org/results_of_the_2016_european_patent_office_staff_survey/d-43311

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**Many examiners say:
I have too little time for doing my job.**

Survey: 70% feel that they do not have enough time to perform their job properly.
Average work time per product (search or examination) decreased by 2 hours.





In 2017, on average, each examiner produced 23% more products than in 2014 and spent about 2 hours less time per product (e.g., carrying out a search or an examination) than in 2014. This means that the average time an examiner has at her/his disposal to work on a product has decreased from 16:43 hours to 14:48 hours (see Figure 2 and Figure 3 and also Appendix A). A cut of another 30 minutes per product is planned for 2018¹⁶. We fully agree with Kluwer Patent blog (one of the top IP blogs) in that :

“you cannot turn the conveyor belt faster every year (...)”

“the EPO management’s stated objectives for 2018 to increase the number of products per employee by another 7% [is] both ridiculous and dangerous. (...) the time necessary for a careful review of a case or a thorough prior art search cannot simply be shortened at libitum.”⁴⁹

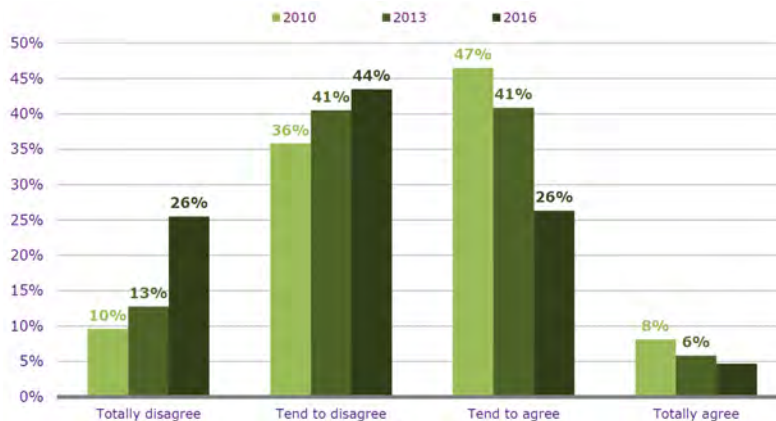


Figure 1: Q57. I have the time needed to perform my job correctly¹⁵

¹⁶ Landing page, DG1 Balanced Scorecard

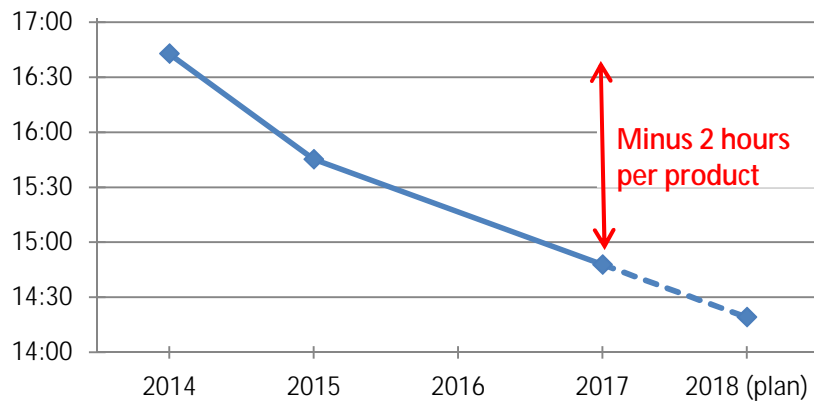


Figure 2: Average time dedicated per product

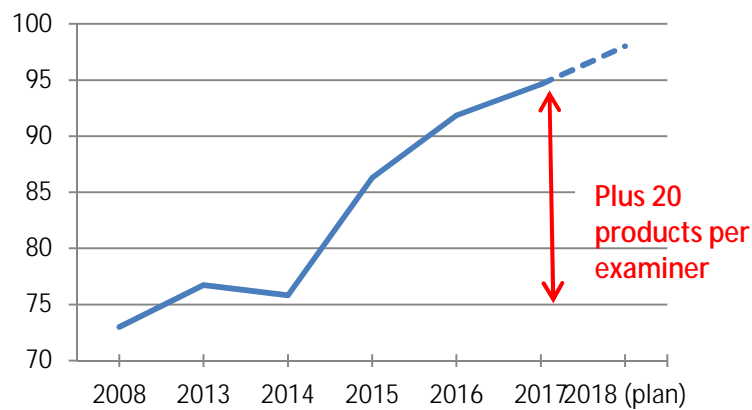


Figure 3: Average number of products per examiner

3.2 Wrong incentives

Incentives at the EPO such as bonuses or promotions are mainly based on productivity figures (e.g., number of products, timeliness, etc.) and only indirectly on factors relating to patent quality. Negative impacts of granted patents with low patent quality will only come to light years after they have been granted. Hence, in a system in which salary steps, promotions and bonuses are only based on short term production figures, the temptation exists to try to meet well-defined short term targets and neglect patent quality. And that managers sometimes succumb to these temptations becomes clear when examiners report to us that they were told that:

"If you cannot reach your target, just stop your search a little earlier."

"Please avoid summoning! Can't you find something grantable in the description?"

"You do not want to sign this grant? Ok, then I will take you off the examining division."

We think that the system in place tends to prevent examiners and directors from doing what they think is right. In such an environment, it is no wonder that examiners sometimes give up and just stop searching whenever the time is up and not when they think it would be reasonable to stop the search.

Independence of examiners is at stake

Furthermore, high production pressure restricts the liberty of examiners to take responsible, unbiased and informed decisions. According to the survey cited above, 90% of the participants consider that the removal of the automatic-step progression in the current career and the resultant increase of discretionary powers of managers did not have a positive effect on the quality of the work produced at the EPO (see Figure 4).

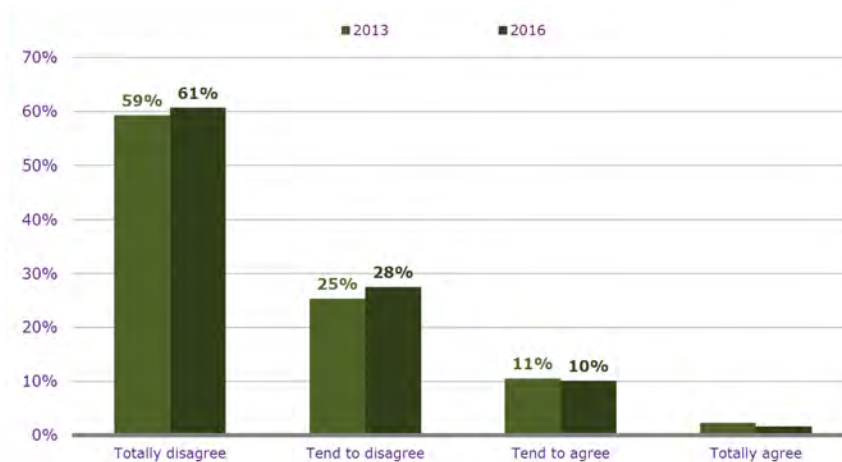



Figure 4: Q104. Do you consider that the removal of the automatic-step progression in the current career, to increase the discretionary powers of managers, is a good thing for the quality of the work produced by the EPO? ¹⁵

2

Wrong incentives: only productivity counts



Steps, promotions, bonuses: everything is based only on short term production targets.
Long-term consequences caused by patents with low patent quality do not get the attention they deserve.
Independence of examining division at stake

3.3 High work ethic: essential for Patent Quality

It seems to be a common perception that in the past the EPO produced a better patent quality than other patent offices. If we take this as a fact, then indicators about patent quality could be identified by looking at the differences of how patent offices are organised. A study¹⁷ published 2015 compared the EPO to the USPTO. Among other differences, they found that:

- The EPO has about double the number of examiners per application¹⁸,
- Examiner salary is higher and examiner turnover is much lower than at the USPTO,
- EPO examiners are more likely to cite non-patent literature.

Henry Ford is believed to have said that: “Quality means doing it right when no one is looking”.

By providing a stable working environment, a good salary and by giving examiners enough time to work on the files, the EPO succeeded in the past in creating an environment in which examiners did what Henry Ford described as ideal: they did patent quality right out of professional ethics without needing an overhead of complicated control mechanisms. For example, they did the extra work and have been looking also at non-patent literature,


¹⁷ Chien, C. (2015). Comparative Patent Quality. Faculty Publications Santa Clara Law Digital Commons. Retrieved from <http://digitalcommons.law.scu.edu/facpubs/898>, and Chien, C. V. (2016, 09). Comparative Patent Quality. Santa Clara Univ. Legal Studies Research Paper No. 0216. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2833980

¹⁸ This number must be taken with care, as the number of applications in the US also includes the “continuations in part” applications. EPO examiners still have more time available, but not double the time.

even before performance tools started measuring this¹⁹. In the past, the EPO succeeded in building something which other offices in the world lack: based on interview data from 140 examiners from different patent offices in the period between 2004 and 2008, Peter Drahos found that the EPO examiners had the best reputation for their esprit de corps – the personal pride examiners took in the quality of their work product²⁰.

3

“Quality means doing it right when no one is looking”



Only a fair and morally sound management style at the EPO can maintain a high work ethic and esprit de corps – the personal pride examiners take in the quality of their work.

An aggressive top-down management style threatens work ethic

Today, we observe an aggressive top-down management style, the focus on monetary incentives, short term targets, controversial managerial decisions (including for example the cases of the suspended judge of the boards of appeal, the dismissal of staff representatives, the recent apparently arbitrary appointments of team managers), bad faith in the relationship between management and staff, non-transparent decision making, etc.; all these factors are currently corroding the social and moral capital which has been build up in the past and which formed the basis of a strong work ethic which ultimately contributed to making the EPO the best patent office in the world.

“When the dream job becomes a nightmare” (Title of TV report about the EPO)²¹

Furthermore, confidence and trust of staff in the management are at historic lows. Nearly 80% of respondents to the above cited survey think that the EPO's current work is not in line with the spirit and values of the EPC (see Figure 6). The tension at the EPO between management and staff reached such highs that even local and national television and

¹⁹ A 2015 study¹⁷ found that EPO examiners were more likely to cite non-patent literature (NPL) than USPTO examiners. While 44% of EPO applications included a reference to NPL, only about 14% of US patent applications did.

²⁰ Peter Drahos, The global governance of knowledge: Patent offices and their clients (2010), cited in ¹⁷.

radio stations reported on it^{21,22}. Also many national and international newspapers reported about the social situation at the EPO^{23,24,25}. See footnote 26 for a detailed list of media coverage of EPO affairs.

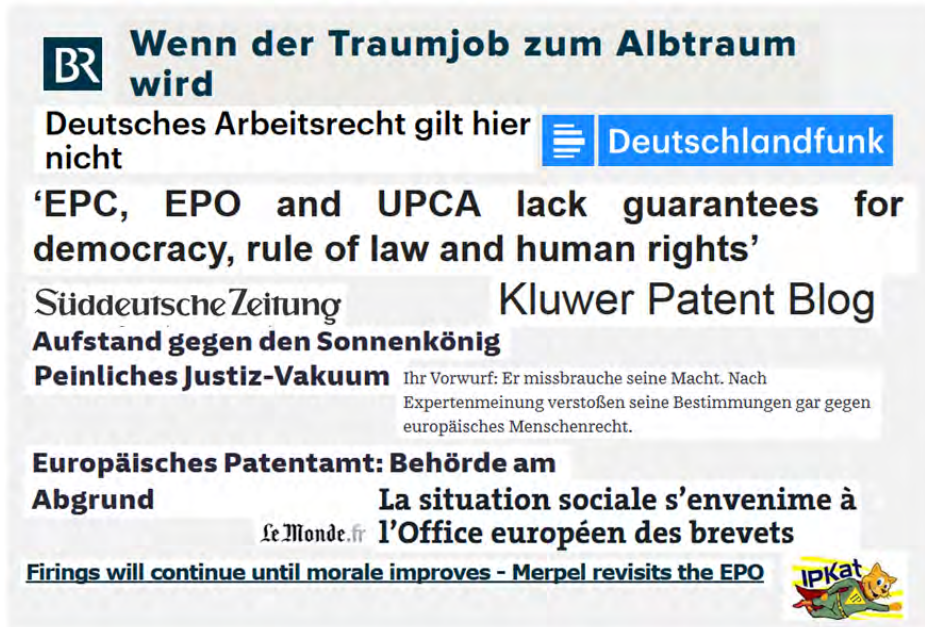


Figure 5: Media coverage about EPO

²¹ Wenn der Traumjob zum Albtraum wird ("When the dream job becomes a nightmare"), Bayerischer Rundfunk, 2016, <https://www.br.de/mediathek/video/die-story-wenn-der-traumjob-zum-albtraum-wird-av:5a3c642f8f247a0018b79cde>

²² Deutsches Arbeitsrecht gilt hier nicht, Deutschlandfunk, 2016, http://www.deutschlandfunk.de/europaeisches-patentamt-deutsches-arbeitsrecht-gilt-hier.724.de.html?dram:article_id=347579

²³ Behörde am Abgrund, Süddeutsche Zeitung, 03.03.2016, <http://www.sueddeutsche.de/muenchen/behoeerde-in-muenchen-europaeisches-patentamt-behoerde-am-abgrund-1.2889015>

²⁴ Aufstand gegen den Sonnenkönig, Süddeutsche Zeitung, 25.11.2014, <http://www.sueddeutsche.de/wirtschaft/europaeisches-patentamt-aufstand-gegen-den-sonnenkoenig-1.2229665>

²⁵ La situation sociale s'envenime à l'office européen des brevets, Le Monde, 11.10.2016, http://www.lemonde.fr/societe/article/2016/10/11/crise-ouverte-a-l-office-europeen-des-brevets_5011722_3224.html

²⁶ Staff union in the European Patent office (Suepo), <https://suepo.org/>

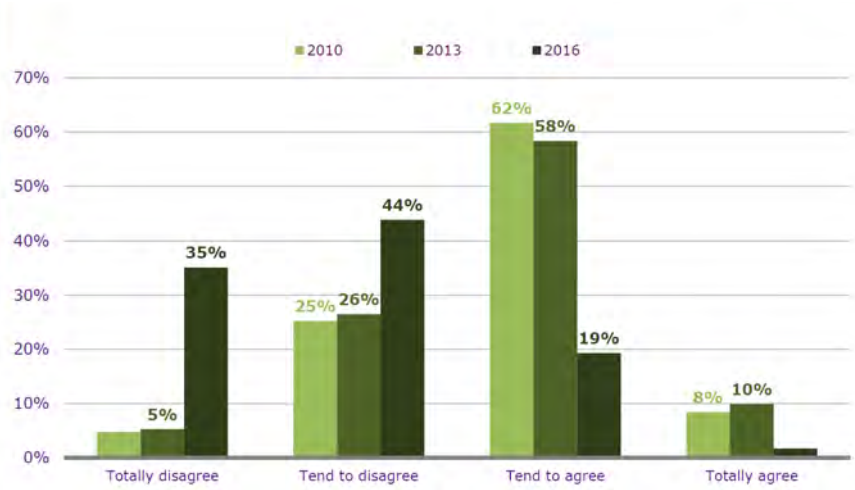


Figure 6: The EPO's current work is in line with the spirit and values of the EPC¹⁵

Over 900 EPO examiners signed a petition stating patent quality is under threat

A recent petition²⁷ on patent quality with the objective to reach 800 signatures reached 924 signatures among EPO examiners (see Figure 7). Although the single signatures are not accessible to the management, this result is very surprising, because under the current difficult working atmosphere at the EPO, examiners are very reluctant to put their names on any document which criticises their employer. It should also be noted that most examiners signed the petition before learning about the further 7% increase of the EPO production target in 2018. This is another indicator that patent quality is under threat by the current management policies.

Today, most examiners still try to take care of patent quality. However, without a change in management style, the accumulated social and moral capital will vanish and the high work ethic, and with that an important ingredient for providing the world's best patent quality, will be lost.

²⁷ Letter to AC: Petition on Patent Quality, 13.03.2018, EPO Intranet, http://my.internal.epo.org/portal/private/epo/intranet/organisation/staffrepresentation/announcements/2018/1520930479199_qualitypetitionresults?WCM_GLOBAL_CONTEXT=/portal/wcm/myconnect/epo/intranet/organisation/staffrepresentation/announcements/2018/1520930479199_qualitypetitionresults

PETITION TO THE ADMINISTRATIVE COUNCIL OF THE EPO	

<p>We, examiners of the European Patent Office, are submitted to constraints that are no longer compatible with fulfilling appropriately our duties within the Search and Examination divisions. We are far too often put in front of the dilemma of either working according to the European Patent Convention (EPC) and respecting the Examiner's Guidelines, or issuing "products" as our hierarchy demands. We feel that timeliness and number of "products" should not be the only criteria to assess the Office and examiners performance, but that attention should be paid to providing a high level of presumption of validity to the patents we grant.</p> <p>We turn to you, Delegations of the Administrative Council (AC), the supervisory body of our organisation. <u>We feel it is our duty to inform you of the situation and consider it is yours to find the appropriate response.</u></p> <p>We put our name under this petition and sign it. However, by fear of reprisal, we request the Central Staff Committee to collect the signed petitions, to file them with a notary/lawyer to certify the number of signatures, and to send only the text of the present petition and number of signatories to the AC, once it has been signed by at least 800 EPO examiners.</p>	
<p>Name:</p> <p>Signature:</p>	<p>Name:</p> <p>Signature:</p>

Figure 7: Petition on Patent Quality

3.4 Files are not always processed by the most competent examiners

We heard from many colleagues that it is increasingly a practice to transfer files from technical fields with a big backlog to other fields which are short on files²⁸. While this practice could be seen as a pragmatic approach for work balance purposes, it is in fact further evidence that the EPO management focuses mainly on productivity and not on patent quality. Indeed, examiners which are allocated files from other fields, do not receive any training or extra time to get acquainted with the new technical field. While it is reasonable to assume that an engineer can quickly grasp the concepts of a neighbouring technical field, a good knowledge of the prior art and of the classification schemes is essential to be able to carry out a good search. Acquiring such knowledge takes time and is also important for a thorough evaluation of a patent application during examination.

Situations where some technical fields have a huge backlog and others are running out of files may be caused by many reasons. Technical fields may boom and die; new technical

²⁸ A quick search on DOSYS revealed hundreds of files which have been pre-classified and assigned to one field but have been subsequently transferred to directorates which normally do not process files in these technical fields.

fields are born at a growing rate. It may also be that the EPO is simply no longer able to attract qualified specialists in certain fields anymore.

Transfer of examiners: a commonly agreed upon and transparent approach is needed

We think that a commonly agreed upon and transparent approach for transferring examiners between technical fields and for the creation of task forces of examiners which are thoroughly trained to help out in neighbouring fields, is the way to go. On the other hand, a random reallocation of files just nourishes the suspicion that some ambitious directors are keen to take over files of other technical fields only to boost the productivity of their directorates and their career, while not taking care of patent quality.

4



Examiners are allocated files which are not in their technical field.

Some directorates are short on files, files of other technical fields are re-routed to these directorates

Examiners do not receive extra training or extra time for working on files from other technical fields

3.5 Quality indicators produced by the EPO management are insufficient

As mentioned previously, patent quality is difficult to measure. This does not mean that one should stop trying. In order to discuss the right balance between procedural efficiency and patent quality some kind of indicator of patent quality is needed. Of course, this should not only include simple quantitative statistics such as the number of cited prior art documents or timeliness. These kinds of indicators give little information about the patent quality as we defined it above.

Patent Invalidation Rate is not a good indicator for Patent Quality

One indicator of patent quality could be produced by analysing the number of granted patents which are maintained, limited or revoked after opposition procedures or litigation in front of national courts. Thus, a high quality patent is a patent which will not be revoked when challenged.

The EPO Quality Report 2016²⁹ gives insights into the number of patents which are judged invalid after being granted by the EPO. Patent revocation in Europe is very low. This is illustrated by the example of Germany, the main validation country for European patents, and one of the main European jurisdictions.

Patent Invalidity in Germany is low, a third of opposed patents are revoked

According to the German Patent and Trade Mark Office³⁰, an average of 420.000 patents granted by the EPO were valid each year in Germany between 2009 and 2014. Of these patents, about 40 per year on average were fully invalidated by the German Federal Patent Court during the same period. These invalidated patents represent less than 0.01% of the total number of granted EP patents valid in Germany.³¹ The rate of opposed EP patents only decreased slightly from 5% in 2014 to 3% in 2017. In 2017, 34% of the opposed patents were revoked and 38% maintained in amended form³².

However, only a tiny fraction of granted patents are challenged and especially litigations in front of national courts might start and finish many years after they have been granted by the EPO. Furthermore, many patents are never challenged, regardless of their quality and companies might settle patent litigation outside courts (See the blog post cited by footnote 49 for further comments on this topic). Thus, the rate of invalidated or revoked granted patents is not a good indicator for patent quality.

EPO Patent Quality indicators are insufficient: CASE, user surveys, DQA

As already mentioned, we base our assessment on the current state of patent quality at the EPO mainly on discussions with examiners. We think that their accumulated experience over the years and their direct everyday involvement in the patent granting process allows them to have an informed view on what is happening at the EPO. This is our way of getting an idea about patent quality. Let us now look at how the EPO management assesses patent quality internally. We will argue that the indicators about patent quality provided by the EPO management are insufficient.

²⁹ Quality Report 2016. Retrieved from <https://www.epo.org/about-us/services-and-activities/quality.html>

³⁰ German Patent and Trade Mark Office, Annual reports 2009-2014.

³¹ It is also worth observing that in 80% of infringement cases in Germany the defendant does not even try to challenge validity. Indeed, there are approximately 1200 infringement cases in Germany each year, compared to only 250 nullity cases (Bundespatentgericht Annual Report, 2014). This suggests that in the vast majority of cases, the potential infringer does not see any chance of challenging the validity of the patent concerned.

³² EPO Intranet, Landing page, File Flow poster.

The EPO management assesses patent quality on the basis of indicators provided by CASE (Conformity Assurance for Search and Examination), the product audits carried out by Directorate Quality Audit (DQA), and user surveys.

Directorate Quality Audit (DQA) is not independent

In our view, the quality audits carried out by the Directorate Quality Audit (DQA) could be a very efficient tool for patent quality assessment. Samples of files are taken from all directorates and are carefully checked by internal auditors, which are examiners who are independent from the directorates the file comes from³³.

However, DQA is under the direct control of the president of the EPO. This fact produces an obvious conflict of interest and sheds a shadow on every report DQA produces³⁴. One cannot escape the impression that the controller is controlled by the controlee. For a serious quality assessment, DQA should be allowed to operate independently from any intervention by management. At the very least, its director should be independent, similar to the chairmen of the Internal Appeals Committee. Of course, stakeholders such as staff representation and experts in the field should be involved in observing the work of DQA.

“Neutral professionals, not cheerleaders, should conduct robust analysis (...)”³⁵

The idea of an independent External Patent Audit Committee (EPAC) has already been brought forward some years ago³⁶:

“The members of this committee would include scientists of international stature who cared about the public good tradition of science and who were prepared to lead an external audit process of a patent office’s work. An EPAC could report directly to a legislature and in this way a legislature would get an independent evaluation of what the national patent office was doing. An EPAC would help to catalyse a public dialogue around the major issues facing

³³ The Quality Audit Procedure for Grant and Search Products, EPO Intranet, http://my.internal.epo.org/portal/private/epo/organisation/dg0/?WCM_GLOBAL_CONTEXT=/epo/intranet/organisation/dg0/pd_06/d_quality_audit/activities/1442404423407_audit_year_2016_the_search_and_grant_audits

³⁴ The EPO Quality Report 2016 explicitly points out that DQA is under the direct control of the President. Probably this is done to underline the importance of this department to the president and its independence from DG1.

³⁵ Kappos, D., & Graham, S. (2012). Of patent feet and metres: getting to standardised patent quality measurements. IAM Magazine(55). Retrieved from <http://www.iam-media.com/Magazine/Issue/55/Features/Of-patent-feet-and-metres-getting-to-standardised-patent-quality-measures>

³⁶ See, e.g., Interview with Peter Drahos, <https://suepo.org/documents/42934/54350.pdf> and Drahos, P. (2010). *The Global Governance of Knowledge: Patent Offices and their Clients*. Cambridge: Cambridge University Press.

patent offices today, issues such as the height of the inventive step and how to improve patent quality.”

As mentioned above, incentives in the patent system are stacked in favour of a patent being granted, which is clearly not in the interest of the general public. Hence, more than ever, an independent body overlooking and assessing patent quality is needed.

Only 14 examiners work for Directorate Quality Audit (DQA)

In 2016, only 14 examiners worked for DQA. They checked 750 grants, 175 searches, 45 refusals and 50 oppositions. The most important part of auditing files is probably the search for new relevant documents. DQA did not find indications that quality changed in respect to the last 4 years³⁷. According to the Quality-Dashboard, compliance for search and grant today score 95% and 85%, respectively; an upward trend since 2011.


The careful auditing of single files is certainly the most reliable internal tool to produce quality indicators. However, we think that sample rates are far too low (0,8% for grants, 750 grants out of 96 000, and 0,07% for searches in 2017)³⁸. And we think that 14 examiners are not sufficient to produce representative results, also because of the high number of different technical fields. According to a management presentation³⁹, this number will further be reduced to 13 examiners in 2018 and 12 examiner in 2019.

Allocating more resources to DQA, inviting also external auditors to participate in the auditing process, involving staff representation, and making DQA somehow more independent from the president's office would be a good start in order to produce reliable patent quality indicators.

5

Patent Quality indicators produced by Directorate Quality Audit (DQA) are not reliable.

<p style="margin: 0;"><u>It is not independent</u></p> <p style="margin: 0;">a) DQA is under direct control of the president.</p>	<p style="margin: 0;"><u>Resources are not sufficient</u></p> <p style="margin: 0;">b) DQA has only 14 examiners and audits only 0,8% of 96 000 grants.</p>
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³⁷ Internal Audit and Oversight, Activity Report 2016, EPO Intranet 10.02.2017, [http://main07.internal.epo.org/projects/babylon/acepo.nsf/0/584d8c70985f6da1c12580c3004a1a62/\\$FILE/170227%20PD06%20activity%20report%202016%20v6%20.pdf](http://main07.internal.epo.org/projects/babylon/acepo.nsf/0/584d8c70985f6da1c12580c3004a1a62/$FILE/170227%20PD06%20activity%20report%202016%20v6%20.pdf)

³⁸ In 2016, total number of grants/audited grants: 95940/750, total number of searches/audited search: 244689 / 175.

³⁹ DQA Quality Audit Programme 2018 MTP 2019-2021, Dec 2017, EPO Intranet, [http://babylon.internal.epo.org/projects/babylon/acepo.nsf/0/43f45049ebc6e610c125821e004d03a7/\\$FILE/DQA%20Quality%20Audit%20Programme%202018.pdf](http://babylon.internal.epo.org/projects/babylon/acepo.nsf/0/43f45049ebc6e610c125821e004d03a7/$FILE/DQA%20Quality%20Audit%20Programme%202018.pdf)

CASE works for assembly lines but not for the grant process

The EPO claims that through CASE (Conformity Assurance for Search and Examination)

“we can identify and learn from systematic quality issues so that they can be prevented from happening in the future.”⁴⁰

CASE is a tool to document and collect errors found by examiners in files passing their desk. We think that while a tool like CASE might work for an assembly line setting to spot re-occurring errors and defects of a product or production process, CASE is not at all efficient in documenting systematic errors during the grant procedure or in providing any indicator of patent quality. By providing a tool with a checklist and an opportunity to give feedback, it might actually contribute to that examiners look more carefully at a file and discuss files more often (and do not simply sign files off). However, in general, colleagues in the division try to solve problems before sending off a search or grant. After all, this is part of the normal work of the division. All the problems (systematic or not) solved at this stage are not at all documented in CASE.

Furthermore, as the confidence levels of staff towards the management are at a historic low, as shown above, examiners tend to avoid having data about errors committed by colleagues or themselves being stored in a computer database. It is also reasonable to suspect that this kind of auto-evaluation is not entirely transparent to the yearly objectives a director or team manager receives. Directors or team managers will probably try to solve problems without using CASE in order not to portray a negative image of their directorates. On the other hand, we heard first-hand from examiners about directors instructing examiners to negatively evaluate files on CASE because the directorate’s production was “too compliant”.

CASE and DQA produce different quality results

Another indicator that something has to be corrected in the way the EPO measures quality is the fact that CASE and DQA produce different quality results. The percentage of conforming AGRAs is 97% according to CASE whereas the quality of the grants is only 85% according to DQA. According to our investigations, CASE and DQA look at the same characteristics when examining a grant, hence the results produced by the two systems CASE and DQA should be the same.

⁴⁰ “CASE - Conformity Assurance for Search and Examination”, EPO Intranet, http://my.internal.epo.org/portal/private/epo/organisation/strategicrenewal/?WCM_GLOBAL_CO NTEXT=/epo/intranet/organisation/strategicRenewal/quality/objectives_metrics/case

KPI	Trend	Actual	Target/Remark
CASE - % Conforming Searches		98,2%	>95%
CASE - % Conforming AGRAs		96,7%	>95%
Quality Audit - Quality of search		95,1%	>95%
Quality Audit - Quality of grants		84,7%	>85%

Figure 8: Screenshot of Landing page: Quality of Products and Processes DG1 (retrieved on 20.03.2018)

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CASE is not suitable to measure Patent Quality

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Small time budgets to check files of colleagues

Another point of criticism about CASE is that only small time budgets are allocated to examiners⁴¹ for carrying out a CASE audit. Hence, mainly easy-to-spot errors are checked and generally examiners are not motivated and do not have the time to redo an entire search. Systematic errors which are committed in a directorate, e.g., about inventive step, can also not be identified by this system, as also the examiner checking the file will be likely to commit the same error.

CASE and quality audit procedures conform to the EPC?

It is questionable if the current implementations of the CASE and product audit procedures are in line with the EPC and sufficiently respect the necessary independence and assure impartiality of the examining and opposition divisions⁴². Both procedures in fact allow that a decision taken by a division can be blocked by a line manager from being sent out until he/she decides that some compliance objections are overcome (see Figure 9). Only the line manager can decide when this is the case and unblock the procedure, not

⁴¹ In 2017, an examiner received 90 minutes of time deduction for carrying out CASE on a search file.

⁴² Articles 18, 19 EPC

the division. Furthermore, the confidentiality of the deliberations of the divisions might be affected. It has to be assured that the CASE and quality audit procedures are not prone to undue interference by the management to the work of the examining division.

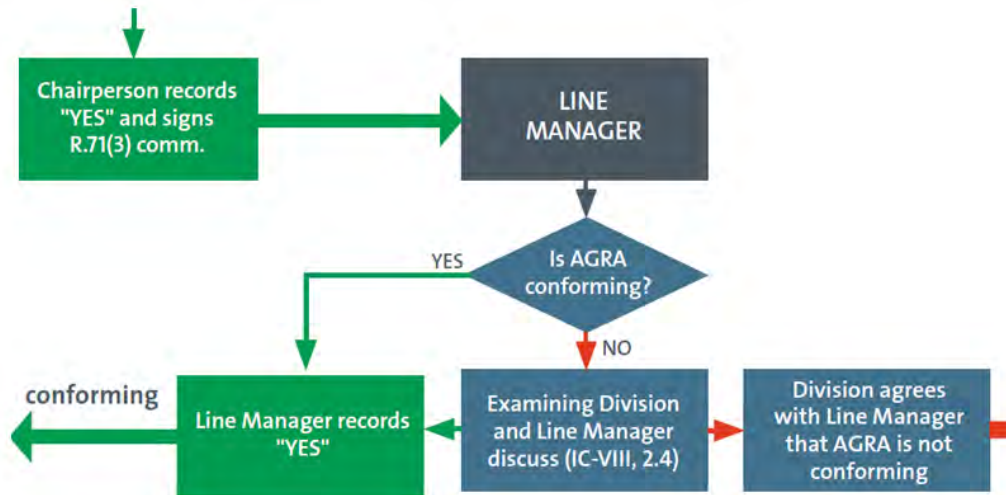


Figure 9: CASE process for grant (excerpt)⁴³. Line Manager decides if grant is conforming and can block a grant from being sent.

Results of user surveys do not provide clear indicators

Another tool used by the EPO to produce indicators about patent quality are user surveys. Unfortunately, user surveys organized by the EPO have to face the same criticism as DQA: impartiality and objectivity is questionable. According to the EPO Quality Report 2016, 80% of the users are satisfied or very satisfied with the search and examination services. However, the definition of these services is not given: whether this regards timeliness, search results, responsiveness of examiners or patent quality is unclear. Satisfaction with the services is summarized in one single diagram. Also, this survey only includes active users of the EPO. The general public is not questioned about their opinion. Another group which has not been asked by the EPO for their opinion for a long time are the EPO examiners.

⁴³ Overview of CASE process for grants (AGRA), EPO intranet, retrieved on 20.03.2018, [http://main07.internal.epo.org/projects/babylon/pdqms.nsf/0/c843be1d0155c2a3c125822b005c6ceb/\\$FILE/Process%20flows.pdf](http://main07.internal.epo.org/projects/babylon/pdqms.nsf/0/c843be1d0155c2a3c125822b005c6ceb/$FILE/Process%20flows.pdf)

Results of independent surveys have to be taken with caution

Independent surveys conducted by external bodies might provide an independent view on the patent quality at the EPO. A survey which received 800 responses published by the Intellectual Asset Management (IAM)⁴⁴ magazine revealed that among the five major patent offices the EPO scored highest in quality and service.

“92% of NPEs, 94% of private practitioners and 92% of corporate respondents regarded the quality of patents issued by the EPO as “excellent”, “very good” or “good”. 15% of corporates and 19% of private practices who responded also said that quality further improved at the EPO over the past year.”

Another survey amongst 168 companies conducted by the German magazine Juve revealed that only 46% are happy with the patent granting process⁴⁵ at the EPO. The respondents identified demotivated staff at the EPO and efficiency measurement as the main cause. One respondent thinks that “das ganze System wieder mehr fachlichen und industriellen Kriterien gehorchen sollte.” („the whole system should be based again on functional and industrial criteria”). See Figure 10.

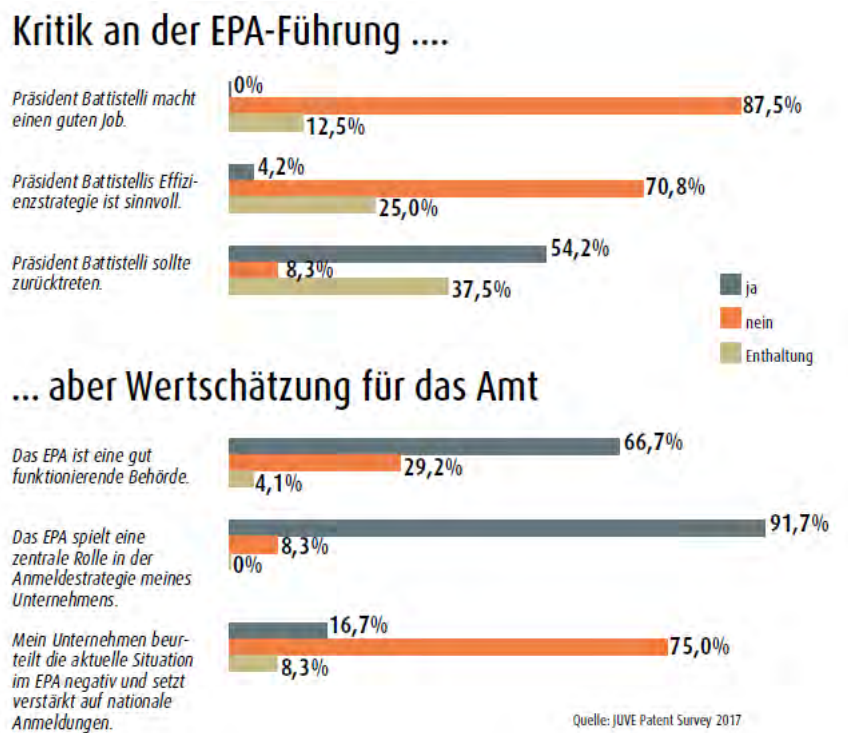


Figure 10: JUVE Patent Survey 2017

⁴⁴ Wild, J., & Clover, S.-J. (2017). The year America fought back. IAM(84). Retrieved from <http://www.iam-media.com/magazine/issue/84/Features/The-year-America-fought-back>

⁴⁵ Klos, M. (2017, 02). Klarer Auftrag. JUVE Rechtsmarkt, 96-102. Retrieved from <https://suepo.org/public/ex17003cp.pdf>

However, these results have to be taken with caution. On the one hand, the objectivity of the IAM magazine and whether the survey is representative are sometimes questioned. IAM magazine is clearly business orientated: "intellectual property from a business point of view" (IAM official website). On the other hand, the response rate of the survey of the JUVE magazine was only 14%.

Kluwer Patent Blog: 2/3 of Patent Attorneys say that quality was decreasing

The user surveys of the EPO give a completely different picture about the opinion of patent attorneys on patent quality than we experienced from other occasions during which attorneys voiced their opinion. During an event on 13.10.2017 on IP matters, with the participation of the chair of the administrative council Dr. Ernst, at the Max Planck Institute in Munich, many patent attorneys complained about decreasing patent quality at the EPO^{46,47,48}. A recent informal survey among 50 patent attorneys was conducted by Kluwer Blog. The average rating of the quality produced by the EPO on a scale of 1 (very good) to 6 (unsatisfactory) was 3.2. Furthermore, 2/3 of respondents were of the opinion that quality was decreasing⁴⁹.

Hence, we think that there are reasons to believe that not everybody is happy with the patent quality at the EPO and that more work has to be done to investigate the matter. User surveys do not seem to be able to capture the full picture.

3.6 Grant rate is increasing and is up at 70%

During the September 2017 meeting of the administrative council, the German delegate raised concerns about the ever increasing grant rate, which is now at 70%. In an

⁴⁶ Now German companies are beating the drum over poor patent quality, The register, 17.10.2017, https://www.theregister.co.uk/2017/10/17/german_ip_lawyers_complaining_about_epo_patent_quality

⁴⁷ EPO – All Problems Solved?, Kluwer Patent Blog, 16.10.2017, <http://patentblog.kluweriplaw.com/2017/10/16/epo-all-problems-solved/>

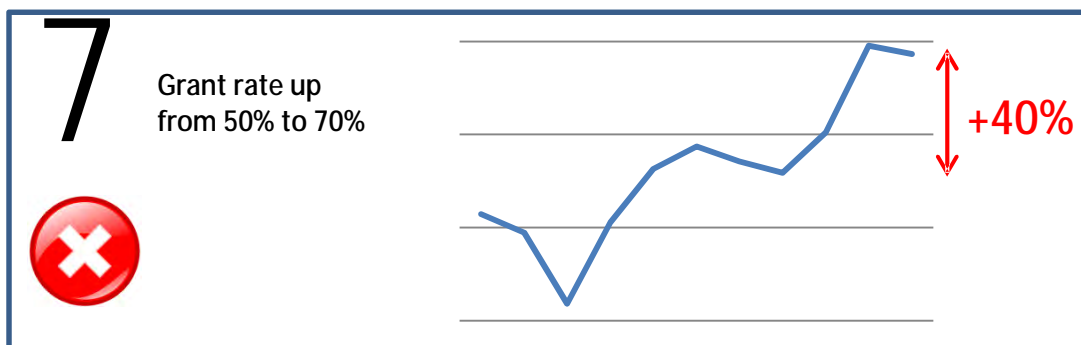
⁴⁸ Kritik an ehemaligem Chef des Europäischen Patentamts, heise online, 14.10.2017, <https://www.heise.de/newsticker/meldung/Kritik-an-ehemaligem-Chef-des-Europaeischen-Patentamts-3861946.html>

⁴⁹ The EPO's Vision (III) – Quality, Kluwer Patent Blog, 05.03.2018, <http://patentblog.kluweriplaw.com/2018/03/05/epos-vision-iii-quality/>

announcement⁵⁰ (Our future: Quality at its best), former Vice President of DG1 Minnoye stated that

“analysis of data collected over the last 10 years shows that grant and refusal rates have remained constant and stable (50% and 3,8% respectively) over time. This also applies to the number of oppositions filed (stable at 4,5% of the granted patents) and to that of the direct grants which is constant at 45% of the total. DQA data also indicate that quality audits have been stable since 2004. All this clearly shows that the increase in production from an average of 73 products per head in 2008 to an average of nearly 93 products per head in 2016 did not happen at the cost of quality but was the result of a gain in efficiency and productivity, and that the quality of our work has in fact increased.”⁵⁰

The same statement about grant and refusal rate can be found in the EPO Quality Report 2016. Refusal and withdrawal rates are of course a dubious indicator of patent quality. The underlying hypothesis is that the quality of the incoming patent applications remains stable over the years. However, this is unlikely, as it can be argued that the legal framework over the years improves (such as the definition of what can be patented and what not, e.g., computer implemented methods, plant variations). Furthermore, search tools for applicants to check available prior art before filing an application are much better today than some years ago (for example, Google Patent Search).



Refusal rate is constant, withdrawal rate decreased by 7%

However, as the EPO management uses such indicators for supporting their claim that patent quality is stable, we investigated also these figures. In fact, it is not clear how the EPO reaches such conclusions. We summarized data gathered from the Quality Report 2016 and the various reports reachable from the Landing Page (See Figure 11 and Figure 13). Contrary to what the Quality Report 2016 states, the grant rate is not stable at 50%

⁵⁰ Our future: Quality at its best, 15.02.2017, EPO intranet announcement by DG1, http://my.internal.epo.org/portal/private/epo/organisation/dg1/?WCM_GLOBAL_CONTEXT=/epo/intranet/organisation/dg1/vp1_org/announcements/2017/1487168867401_communique_mm17

but increased to about 70% in 2016. Our investigation also revealed that if one considers the refusal and withdrawal rates after the first communication is sent to the applicant, the refusal rate is in fact constant at around 6%. However, the withdrawal rate decreased by about 7% over the last years.

Whether the grant rate gives much indication about patent quality is open for discussion. However, the trend is so strong (increase of about 20 points in comparison to 2010) that it deserves a proper investigation.

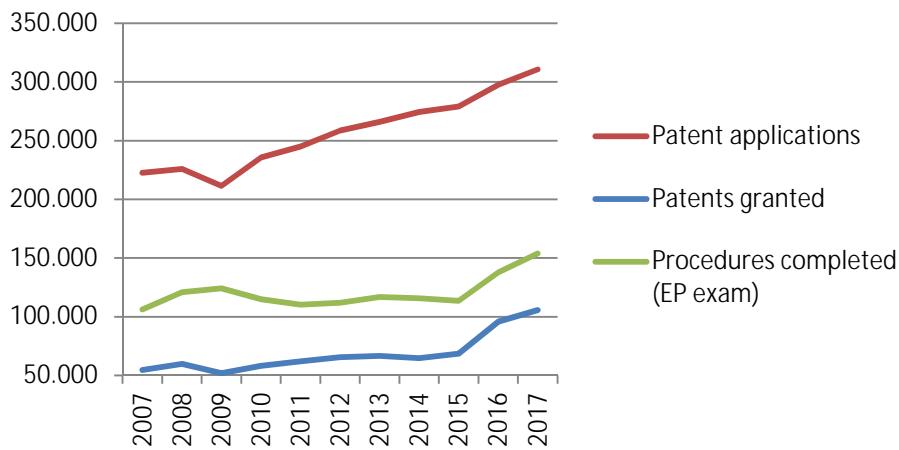


Figure 11: Number of EP patent applications, granted patents and completed EP exam procedures

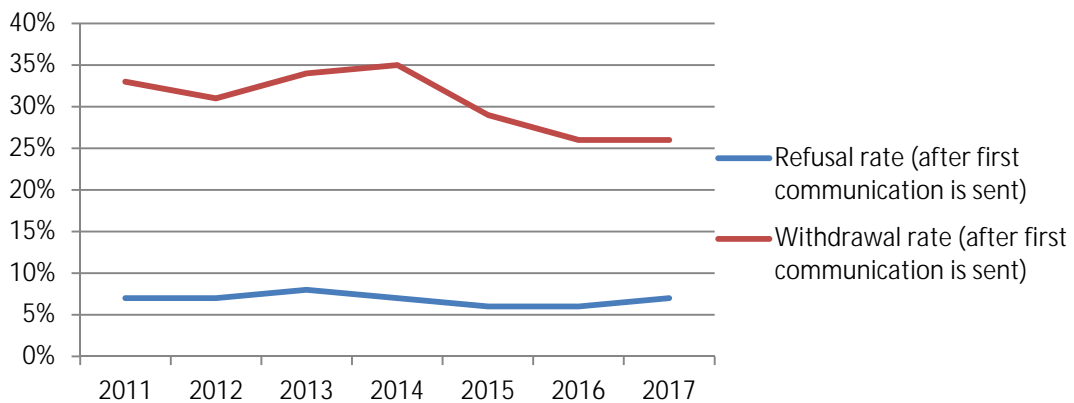


Figure 12: Refusal and Withdrawal rates, share of refused and withdrawn patent applications with respect to the total number of completed EP procedures per year

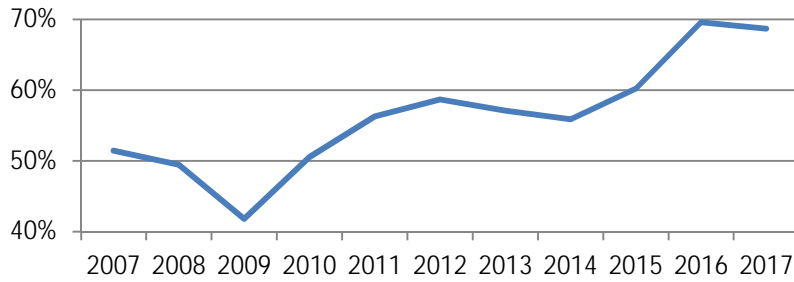


Figure 13: Grant rate, share of granted patents with respect to the total number of completed procedures in EP examination per year

3.7 Attorneys publicly criticise the Patent Quality at the EPO

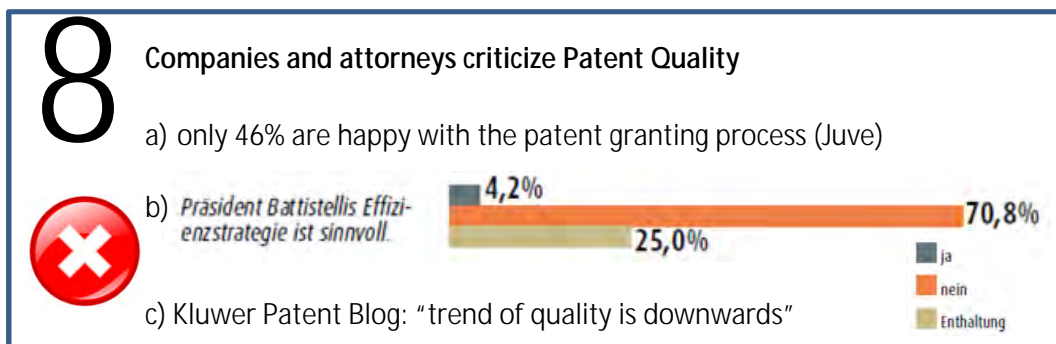


We also noticed that patent attorneys are increasingly critical of the services produced by the EPO. During an important event on 13.10.2017, with the participation of the chair of the

administrative council Dr. Ernst, at the Max Planck Institute in Munich, many patent attorneys voiced their concerns about decreasing patent quality at the EPO. They received enthusiastic applause^{46,47,48}.

Recently, Kluwer Patent Blog (one of the top IP blogs) dedicated a long blog post to patent quality at the EPO. It concluded that:

“it is presently not at all the case that [EPO] quality is outstanding or ‘setting worldwide standards’. Even worse, the trend of quality is downwards, which is most likely caused by the current EPO policy focusing too much on “production”.”⁴⁹



3.8 The Future: will the EPO be the new USPTO?

In the past, the USPTO was criticized for its low patent quality; it has since then positively evolved. In a study¹⁷ about patent quality which compared the EPO to the USPTO, among others, examiner salary and turnover were identified as major differences. Another study²⁰ found that the EPO had the best reputation, including for its searching capabilities and esprit de corps – the personal pride examiners took in the quality of their work product. In our view the EPO management current policies and the plans for the future risk to overcome these differences and make the EPO like the USPTO of the past.


Fixed term contracts: A new threat for Patent Quality

The recent decision to only offer fixed 5-year time contracts to newly hired examiners, instead of permanent contracts, is a new serious threat for patent quality. It undermines the loyalty of the staff towards the EPO and it further jeopardizes the independency of the examining division. Furthermore, it is doubtful that the EPO will still be able to attract qualified specialists in all technical fields⁵¹.

9

Working conditions directly influence Patent Quality

Will the EPO become like the USPTO in 2010 ?



Factor	USPTO in 2010	EPO in 2010	EPO in the future
Examiner Pay	US civil service grade	Significantly higher than USPTO	Significantly higher than USPTO X
Examiner Turnover	33% per year	< 5% per year	< 5% per year X
		Best reputation for the personal pride examiners took in the <u>quality</u> of their work	?
Patent Quality	poor	★ The Best "Golden Standard"	The Best "Golden Standard" X

⁵¹ The average entry age of examiners is currently 36 years.

3.9 The EPO does not invest in the future

Another measure to foster procedural efficiency was to increase human resource allocation to the core business of the EPO, the search and examination procedure. Some years ago, examiners were offered many opportunities to dedicate part of their work time to projects such as the improvement of search tools or the automation of the patent granting process. Opportunities existed to work for some time in other departments of the EPO which were not directly linked to the search and examination process. This kept staff motivation high and valorised experiences and competencies of the examiners, most of which are engineers who have worked in the industry and many of whom have doctoral degrees.

Cut on involvement of examiners in internal projects

These projects were an investment in the future, an active involvement of the staff in identifying upcoming challenges for the EPO. By abolishing these projects and substituting them partially by work packages for which no time deduction is given or by outsourcing, the EPO again prioritises short term gains and neglects to invest in new ideas for the future.

Cut in resources for patent classification

Also in other areas the administration seems to neglect negative long-term consequences. A further example is patent classification: it does not seem to be part of the core business of the office anymore, and colleagues told us that fewer and fewer resources are allocated. For example, in 2017 the used A100-budget for the classification of incoming documents decreased by approx. 10% in comparison to 2016⁵² (see Table 1); no data for previous years is available unfortunately. The improved automatic classification tools are not counterbalancing the cut in time resources allocated to examiners for classification tasks. Here too, the consequences on patent quality and in particular on the quality of the searches because of an inaccurate classification of patent applications will only be visible in a few years.


Budget	days validated 2016	days validated 2017	difference
A100-Classification of incoming documents	15 068	13 685	-9,18%

Table 1 Example office wide Time Budget Classification⁵²

⁵² Landing page, Usage Time Budgets

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EPO does not invest in the Future



- only focus on core business,
- examiners are much less involved in internal projects which prepare the EPO for future challenges,
- cut in resources for classification tasks,
- cut in resources for training.

Cut in training resources

Many examiners told us that resources and time deductions for trainings and team buildings have been heavily reduced in recent years. Furthermore, most of the trainings today are carried out by means of e-learning courses (e.g., automated online presentations and video clips) and little time deduction is provided. E-learning courses are cheaper in comparison to classroom training; however their effectiveness is limited as they do not include any personal interaction and feedback. Especially newcomers receive less training in comparison to a few years ago. The time budgets for the coaching on the job of newcomers by more experienced examiners have also been reduced. Much of the coaching has been put on the shoulders of the chair of the divisions of the single files who does not receive any time deduction for assisting inexperienced colleagues.

See Table 2 for a few examples of time budgets which have been cut in 2017 in comparison to 2016. Unfortunately, no data for the years 2010-2015 is available to us. An open and transparent exchange with the management and a careful study of time budget allocation data of the years 2014 to 2018 could help to clarify the situation and correct trends which are not supporting patent quality.

Budget	days validated 2016	days validated 2017	difference
B320-Visits to industry	2802	2117	-24,45%
B340-Trainee-L & D courses	6237	4648	-25,48%
B410-Trainee-Computer skills	460	76	-83,48%
B420-Trainee & Trainer Mngmnt skills	314	114	-63,69%
B110-Trainee-Initial Training	9532	9128	-4,24%
B120 - Trainee - 3 Y Contract - Language Training	452	417	-7,74%

Table 2 Examples office wide Time Budgets Training and visits to industry⁵²

4 Conclusions

We find that patent quality at the EPO is under threat by the current management policies which focus too heavily on short term goals regarding timeliness, efficiency and productivity. A re-balancing of the focus is urgently needed.

We think that efficiency which maintains patent quality can be primarily achieved by an investment in the staff: for example in a continuous training in the ability of examiners to use search tools, to quickly analyse a patent application, to spotting clever search statements, to be able to communicate efficiently and to make pertinent suggestions, to staying up-to-date in a technical field, etc. Undue production pressure and an authoritarian management style mainly produce haste and tunnel vision. Important is also creating a friendly working environment in which it is possible to quickly get opinions from colleagues in case one needs support and help in judging an application. An excessive competition between examiners hinders collaboration and an open exchange.

However, most essential for patent quality are transparency, trust, shared values, engagement and a common approach. We hope that this discussion paper will contribute to bringing us closer to these goals.

5 Appendix A

Some production figures of the last years.

Year	2013	2014	2015	2016	2017
A Total Searches	203.393	213.008	238.077	244.689	247.503
B International preliminary examinations	7.871	7.853	9.363	9.180	8.836
C European examinations	101.147	96.062	113.586	137.939	153.858
D European patents granted	66.712	64.613	68.419	95.940	105.635
E Patents opposed	2.963	3.063	2.898	2.938	3.647
F Decisions in opposition cases	3.167	3.157	3.713	4.102	4.072
G Total Examination (B+C+F)	112.185	107.072	126.662	151.221	166.766
H Total Exam and Search (A+G)	315.578	320.080	364.739	395.910	414.269
I Number of examiners	4.112	4.221	4.227	4.310	4.378
Product per Examiner (H/I)	77	76	86	92	95
Increase in respect to 2013		-1%	12%	20%	23%
Time per product (in respect to 2013)	100%	101%	89%	84%	81%
Difference in time (in respect to 2013)	0	1%	-11%	-16%	-19%

Sources:

Rows A-F: Annual Report 2017, 5 years overview

Year	2014	2015	2016	2017
J Days per product	2,09	1,97		1,85
Difference in time in respect to 2014	0%	-6%		-11%
Hours per application	16:43	15:45		14:48
Difference in time in respect to 2014 (Hours)	00:00	-00:57		-01:55

Sources:

- Row J: DG1 strategic directions for 2018, announcement on Intranet, 31.01.2018, http://my.internal.epo.org/portal/private/epo/organisation/dg1/?WCM_GLOBAL_CONTEXT=/epo/intranet/organisation/dg1/vp1_org/announcements/2018/1517407518243_strategic_directions_2018
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