



IPQC

Conference on Patent Quality, 14.06.2024
On-line and On-site



Industry Patent Quality Charter

EPO Strategic Plan 2023

Focus on Timeliness and Efficiency

“Throughout its forty-two-year history, the EPO has consistently shown its ability to respond to challenges and changes in the international patent landscape and manage evolutions in the IP system. Demand for patent protection has risen, and the EPO has increased its production and productivity. The EPO has responded with better timeliness and innovative initiatives such as Early Certainty and PACE.”

“Launched in 2014, the Early Certainty initiative has met that need by helping to reduce the average time needed for search, examination and opposition. As a result, the EPO's users have been able to obtain greater legal certainty at an earlier stage, which has, in turn, helped enterprises to take strategic decisions on the use of their innovations, patents and IP portfolios. There has also been a benefit for the Office. Reduced processing times at all stages of the patent granting procedure – combined with increasing production – have contributed to a reduction of the Office's backlog of pending files. At the current rate of progress, the Office expects to reduce its backlog to a steady-state regime within three years. The EPO is also currently assessing what constitutes an optimal stock.”

IPQC (currently 24)



Patent granting process



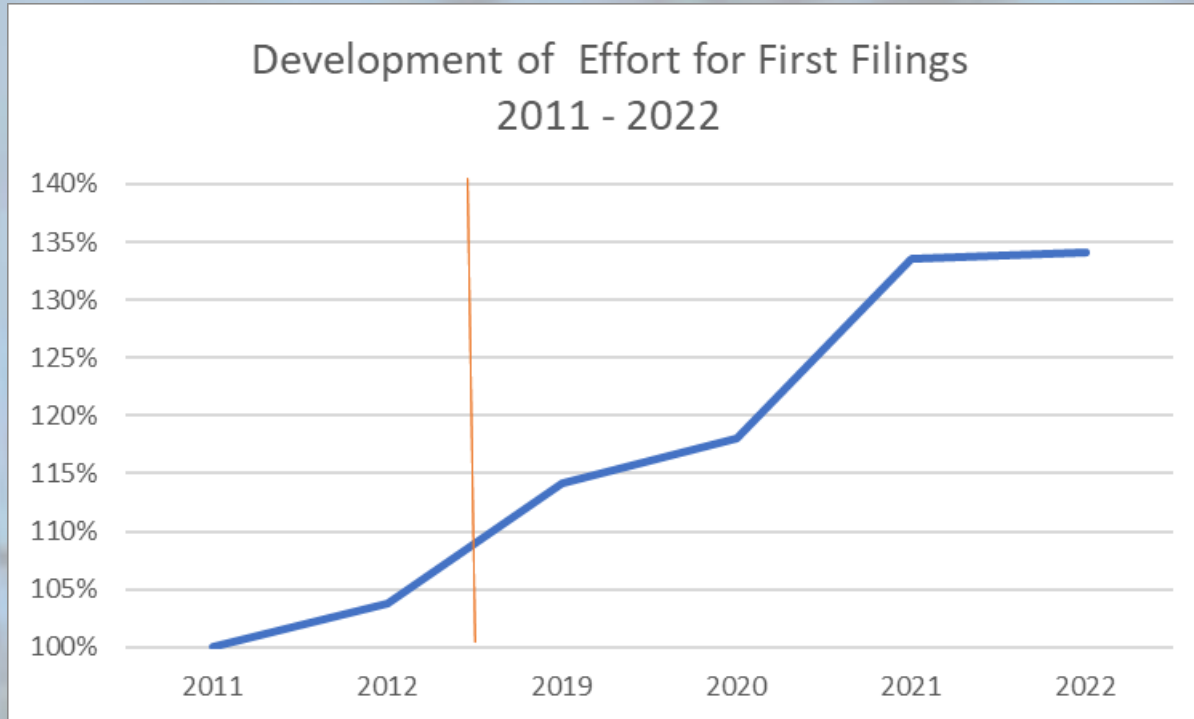
EPO	2015	2016	2017	2018	2019	2020	2021
Grant rate	61.5%	64.2%	67.3%	71.8%	70.0%	71.1%	70.6%
Revocation after opposition	37.5%	34.3%	33.4%	30.3%	30.5%	35.0%	28.8%
Revocation after opposition-appeal	41.0%	38.7%	39.2%	43.9%	45.5%	42.2%	46.0%

2023 Update:
Grant rate : 77%
Successful oppo: 73%

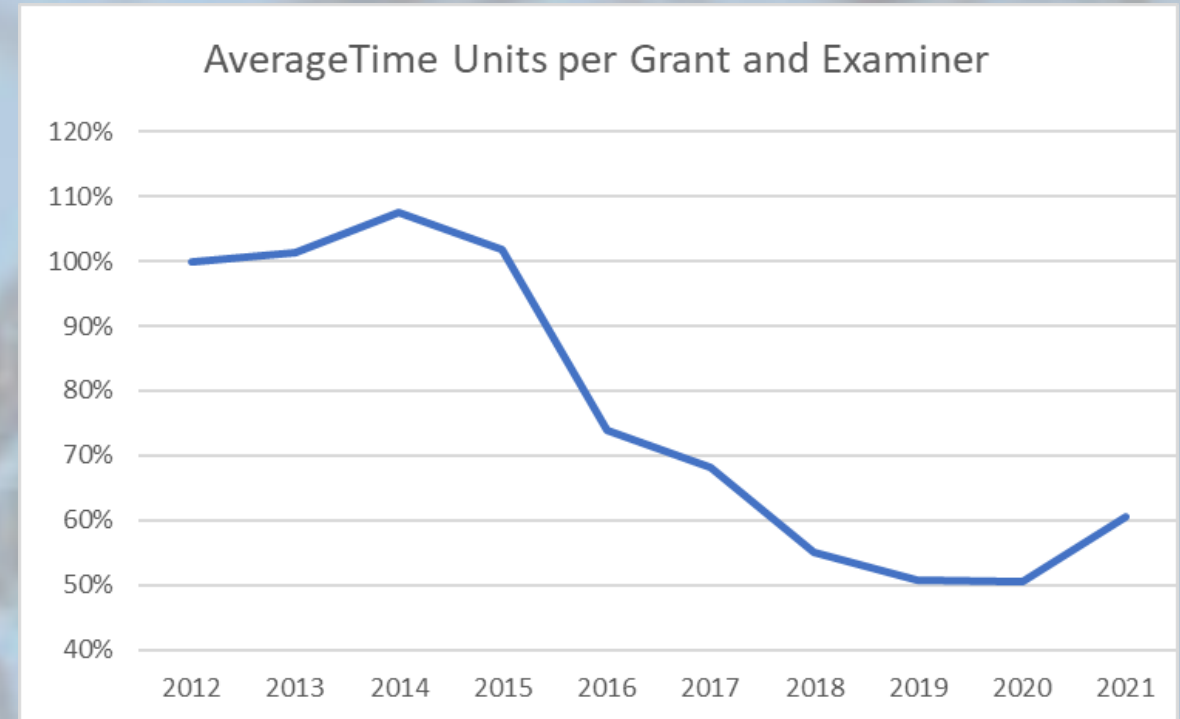
Source: BDI, IPQuants

Some Statistics to compare between Industry and EPO

Siemens

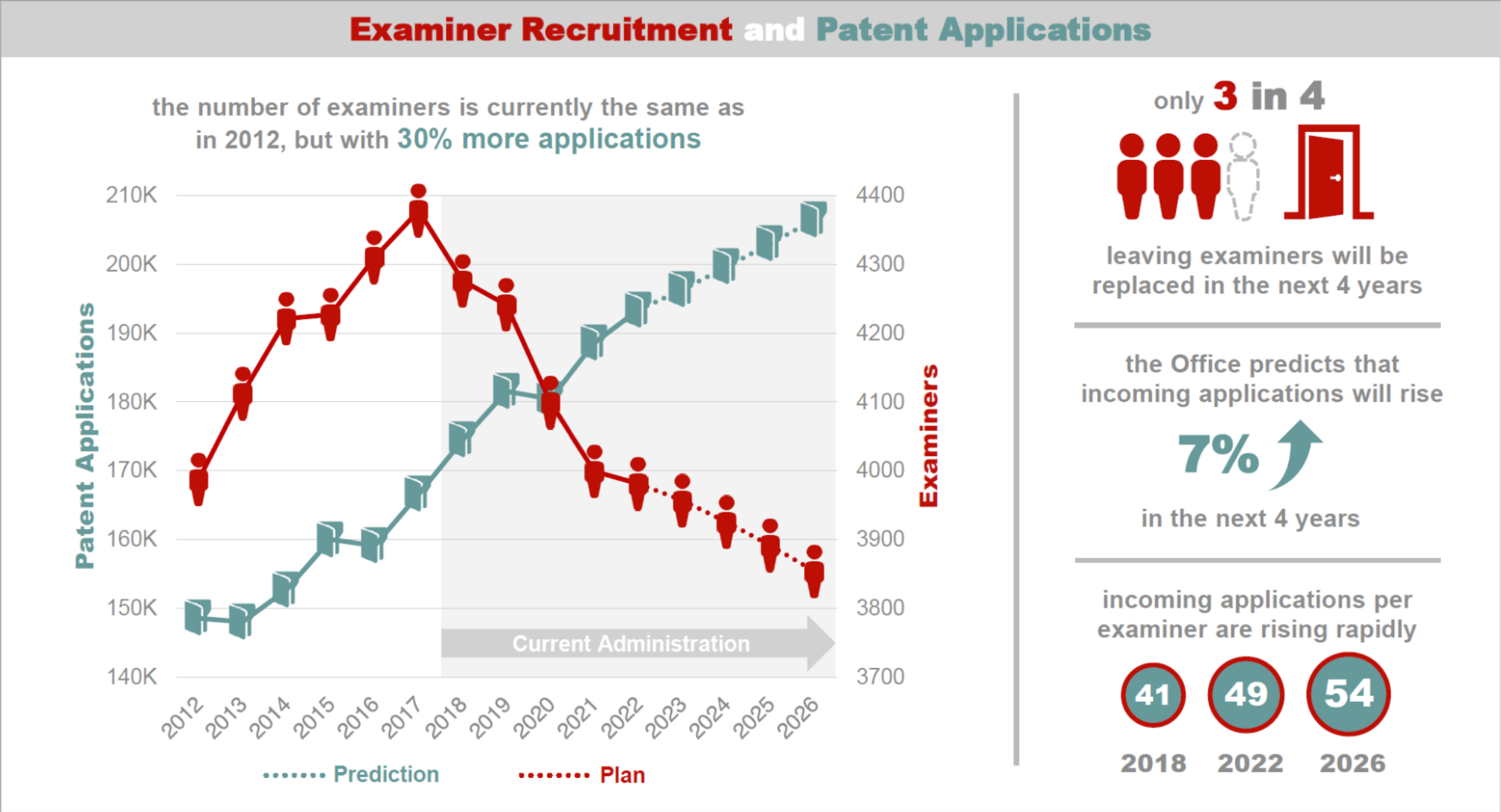


EPO



Source: Siemens and EPO annual reports

More applications for less examiners



Sources: CA/100/22, CA/50/22, Landing page AIE, DG1 management dashboard, Patent Index, Social Reports

Examination of inventive step in CII claims, G 1/19, COMVIK and how it is done by the EPO Examiners

Example 2: 2021P02273EP Monitoring apparatus for quality monitoring

1. ~~Monitoring apparatus for quality monitoring of a supplemented manufacturing process to a set of predefined manufacturing processes of industrial manufacturing~~, comprising at least one processor configured to perform the steps:

- obtaining more than one teacher models, wherein each teacher model is a learning model trained to monitor one of the predefined manufacturing processes,

- providing an initial version of a student learning model and an initial version of a generator learning model, for each teacher model,

a) copying a teacher specific student model from the current version of the student learning model,

b) adapting the teacher specific student model by minimizing a first error between an output data of the teacher specific student model and an output data of the teacher model, wherein the output data of the teacher specific student model and the output of the teacher model are processed with adaptation data samples created by the current version of the generator learning model as input,

~~c) computing a second error between a first output data of the adapted teacher specific student model and a second output data of the teacher model, wherein the first output data of the adapted teacher specific student model and the second output of the teacher model are processed with evaluation data samples created by the current version of the generator learning model as input data,~~

~~d) adapting the current version of the generator learning model by maximizing a statistical divergence between the first output data and the second output data,~~

~~e) adapting the current version of the student learning model based on the second errors of all adapted teacher specific student models, and~~

~~repeating steps a) to e) until the adapted student learning model reaches a predefined quality value,~~

~~- customizing the adapted student learning model to the supplemented manufacturing process by training the adapted student model with annotated data of the supplemented manufacturing process, and~~

~~- monitoring the supplemented manufacturing process by processing the customized student model using data samples collected during the supplemented manufacturing process as input data.~~

[...] it is the object of the present application to provide a monitoring apparatus and method which accelerates the provision of data-driven applications and leverages the knowledge contained in data from different previous manufacturing situations without accessing this data itself and therefore preserving data-privacy (in specs).

EPO's assessment:

It is to be noted (see EPC GL G-II.3.3) that :

(a) the **alleged technical purpose of monitoring** the quality of a supplemented manufacturing process to a set of predefined manufacturing processes of industrial manufacturing, which amounts to monitoring **(which is not even controlling)** a technical process, is not sufficient to confer a technical character to the mathematical method in that it is not specific enough as the nature of the manufacturing appears as being necessary to be specified;

(b) **the scope of the method**, i.e. "monitoring the supplemented manufacturing process", which is also the result of the claimed mathematical method, does not appear to have a direct technical relevance *per se* **(which would have been the case of a method of controlling a technical process)**

(c) the claimed mathematical method does not appear to be sufficiently linked with the technical purpose (G-II.3.3: "The claim is to be functionally limited to the

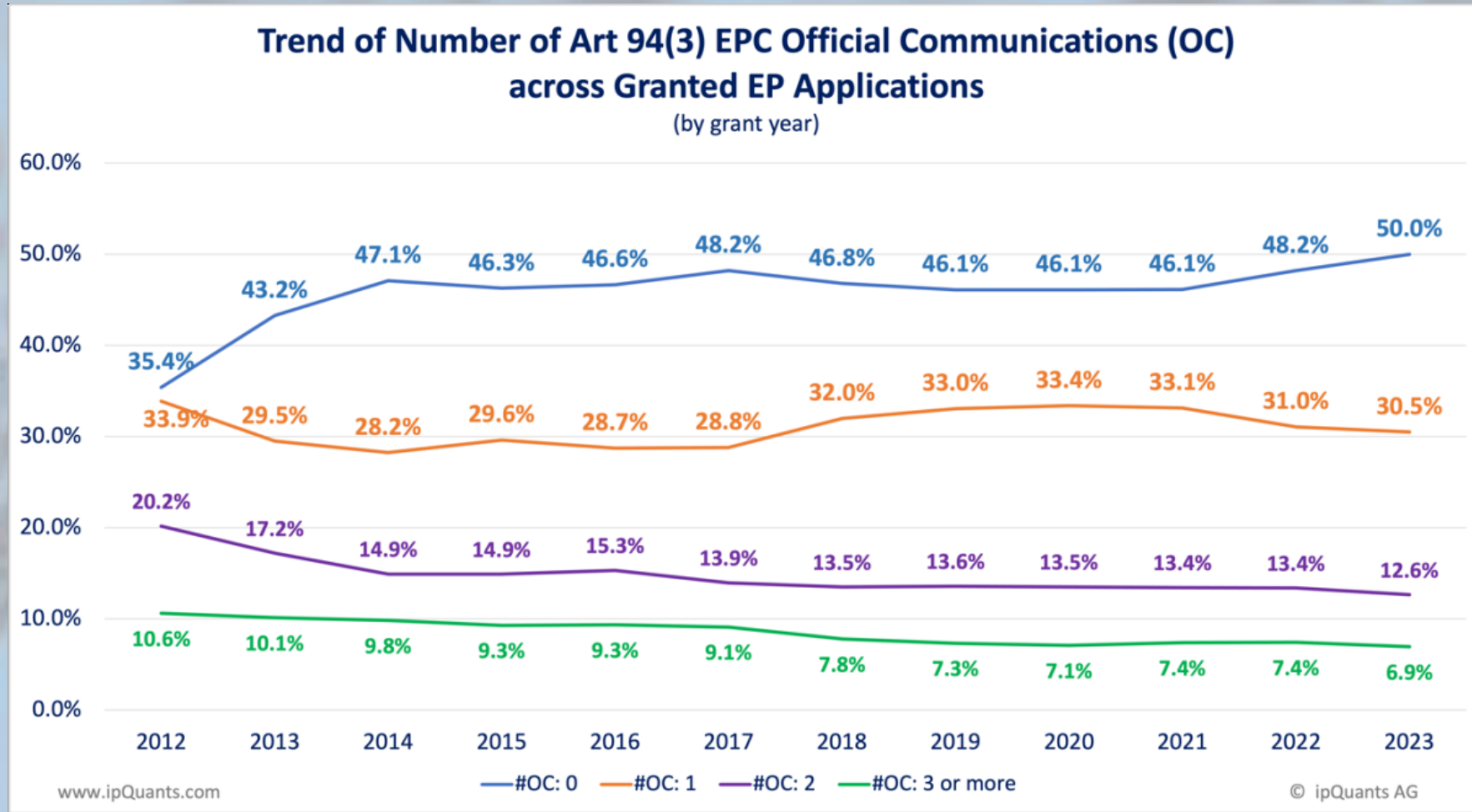


I say: nothing is technical.
What say you?

Is it became too easy to
reject the applications?

SIEMENS

Patent applications are granted with less Office Actions



Source: ipQuants

Analysis of Opposition Decisions of BoA in 2022

- **Data Basis**

Around 1000 published oppositions decisions of the Boards of Appeal of the EPO have been analyzed by a PhD student of the University of Osnabrück

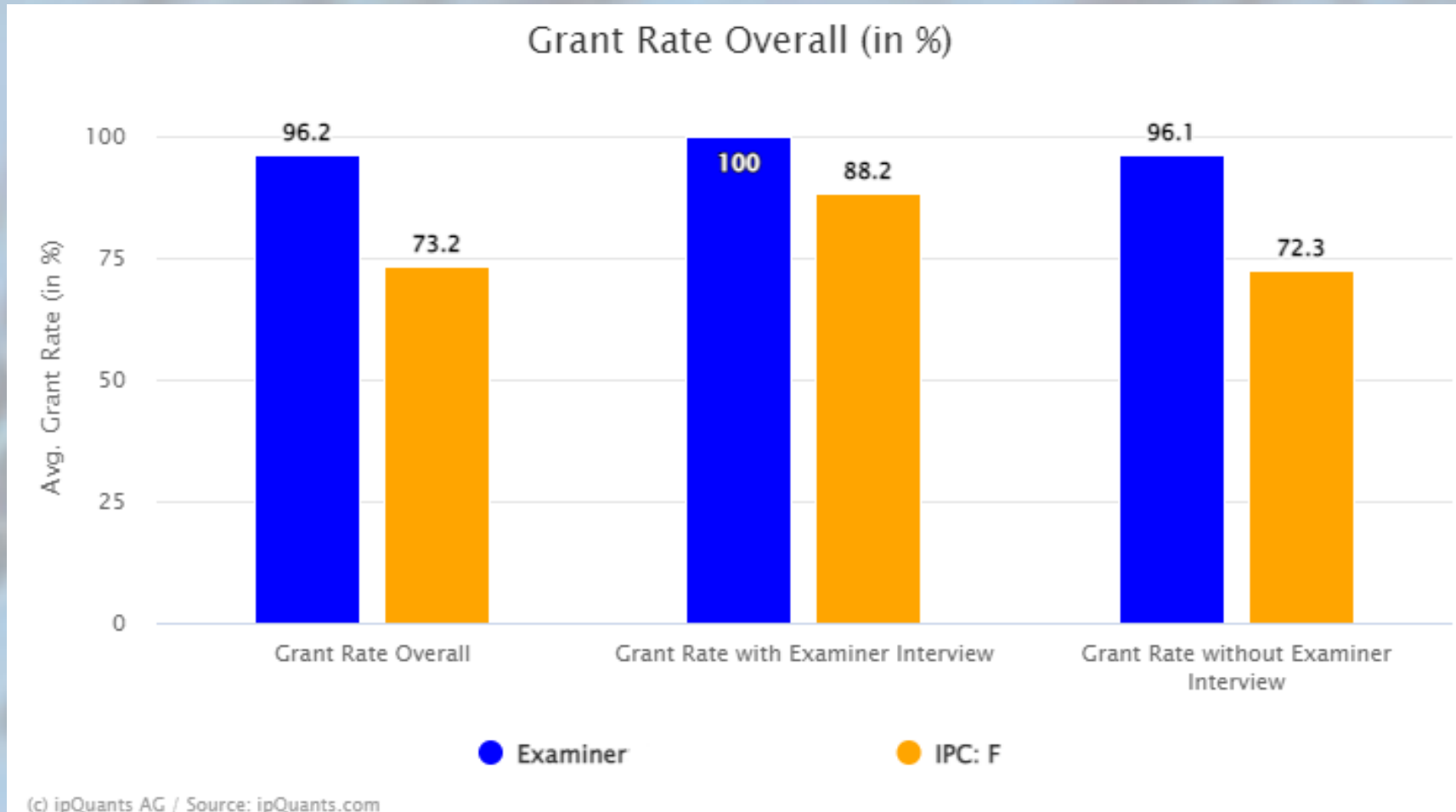
- **Correction rates by BoA**

- In 89.3% of all cases, the BoA changed the decision of the Opposition Division by
 - Maintaining 39.5% of the opposed patents in amended form
 - Revoking 49,8% of the opposed patents
- Only in 10.7% of all cases, the decision by the Opposition Division was upheld unchanged
- In **only 8.6%** of the cases, the basis for the correction were **documents not available in the search files**.
The prior art of these cases related to public prior uses, hearing of witnesses, sales catalogues, brochures, user's notices, oral disclosures in conferences and PhD dissertations.

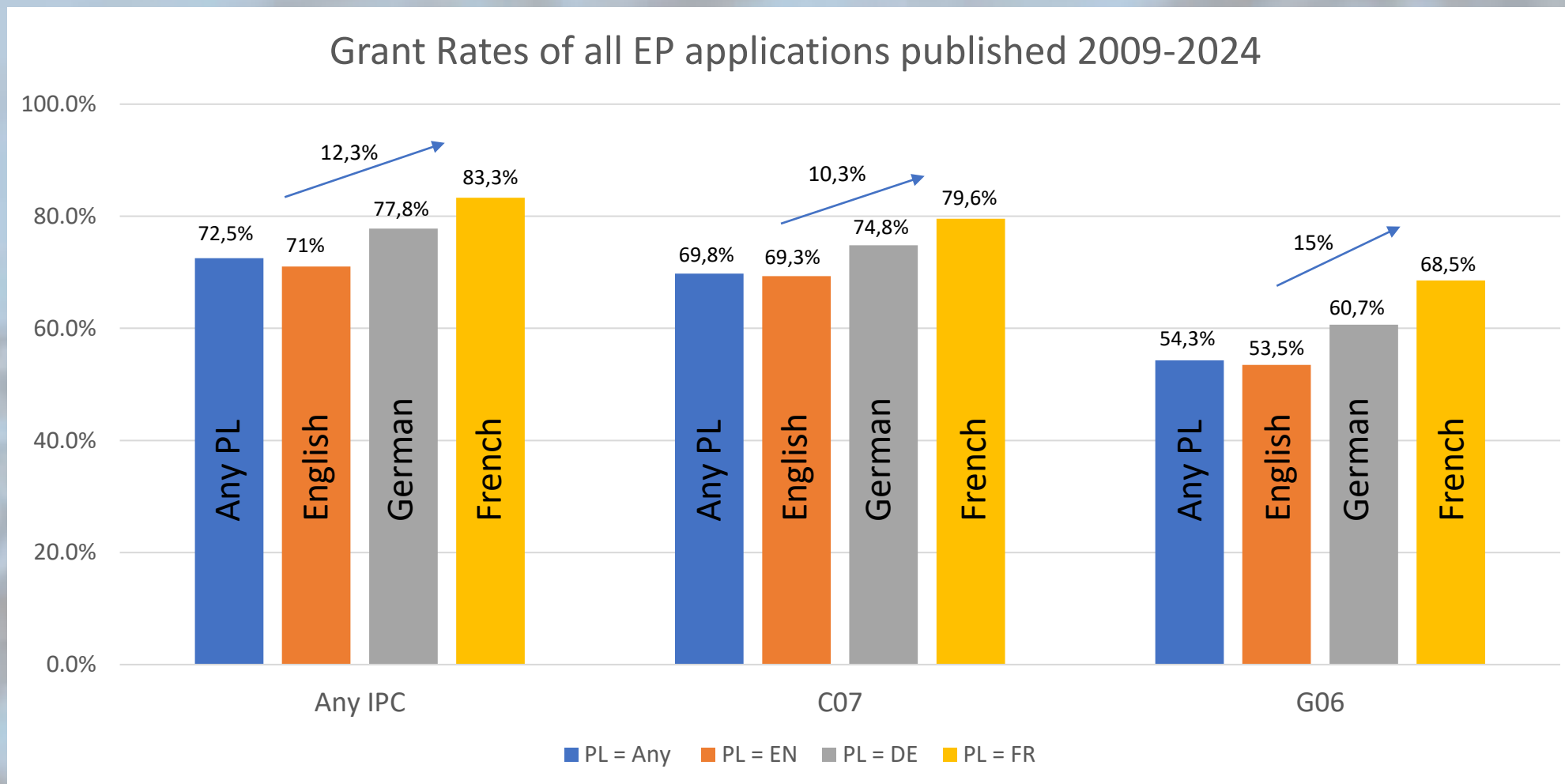
- **Trend for 2023**

- First figures confirm this trend
- Even more decisions of the Oppositions Division are set aside by the BoA (57.7% compared to 47,7%)

Some Examiners with Above-average Grant Rates



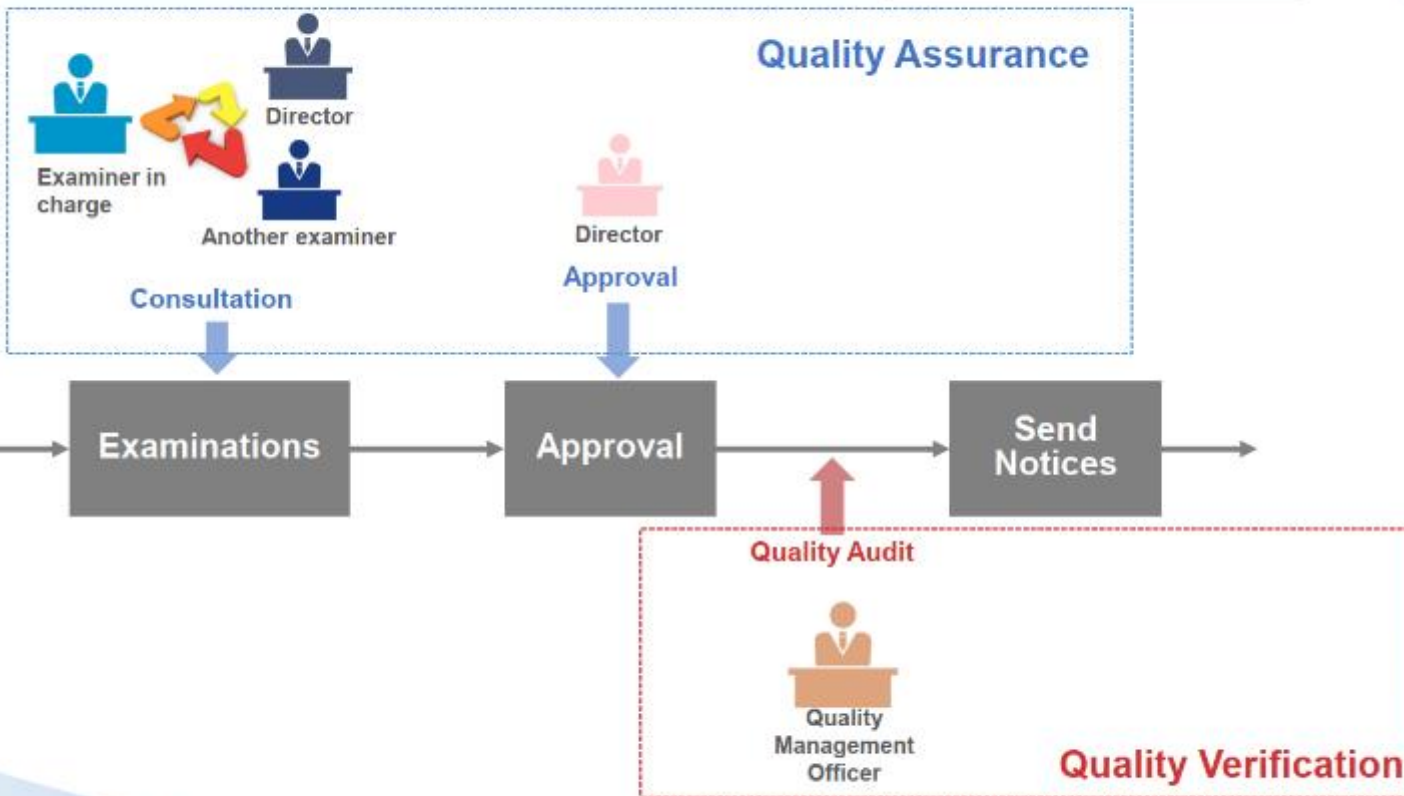
Patent applications in French and German are granted more often



Source: ipQuants (<https://ipquants.com/the-impact-of-procedural-language-on-patent-grant-rates-at-the-european-patent-office/>)

The Japanese Approach

Workflow of Patent Examinations and Quality Management System



Japan Patent Office

2

Completed by external evaluation:

External Evaluation on Quality Management

Subcommittee on Examination Quality Management (since 2014)

- Committee members include a wide range of professionals, such as businesspersons, legal experts, etc.
- Committee members evaluate the JPO's quality management system and make suggestions for improvement from the perspective of their own field of expertise.
- Annual committee meetings and reports are open to the public.

<https://www.jpo.go.jp/en/introduction/institute/qa/qa/index.html>



Japan Patent Office

4

Measures to Improve Patent Quality

	Measure
1	<p>Processes, available time and targets of EPO should be such that</p> <ul style="list-style-type: none">• Complete searches are incentivized, including transparency of search strategy• Complete and thorough examinations are incentivized• Clarity issues are addressed early and firmly• Increased consistency between decisions of Opposition Divisions and Boards of Appeal• Bring examining divisions back to life (and allocate time)
2	<p>Working conditions at EPO should be such that</p> <ul style="list-style-type: none">• Experience and language skills of Examiners are appreciated• Retention of Examiners is prioritized• Training of Examiners is up-to-speed with technological development and jointly done with Industry• Ensure an efficient onboarding and mentoring of new Examiners
3	<p>User Feedback and Inclusion system is focused and effective</p>

Only valid and enforceable patents fulfil their objective to stimulate innovation!

EPO Strategic Plan 2028

New quality commitments

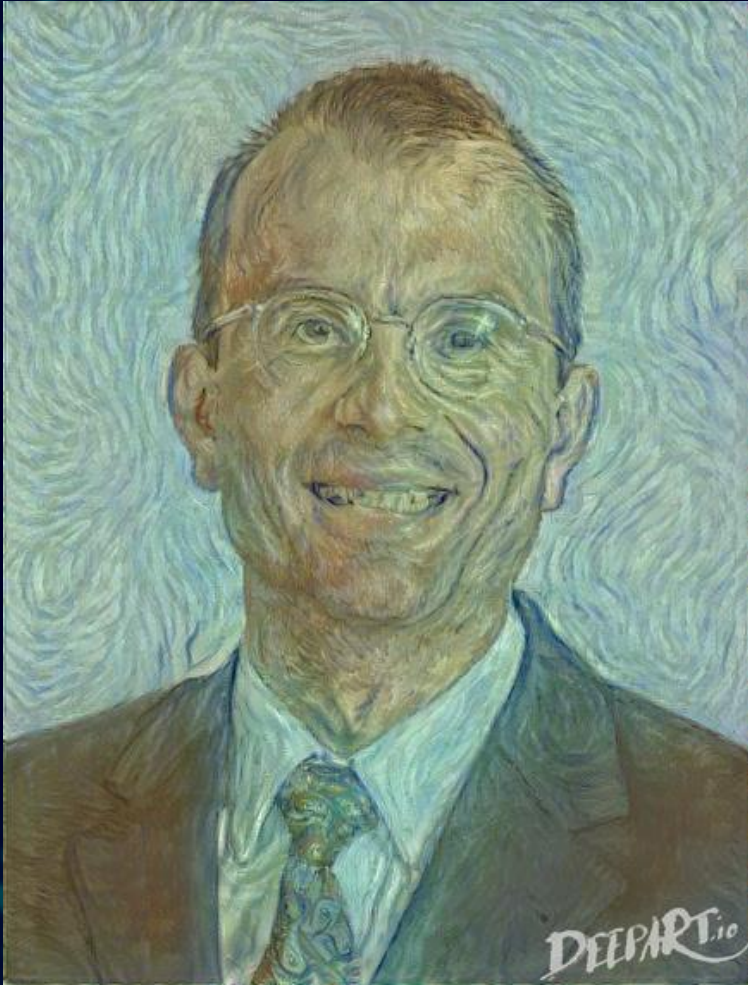
“The EPO is committed to

- delivering timely, high-quality products and services by improving the quality of classification, formalities and file allocation;
- improving the completeness and accuracy of searches and written opinions;
- increasing the thoroughness and consistency of examination;
- providing access to a fair, high quality and transparent opposition procedure and the right to be heard; and implementing quality as a shared responsibility and achieving quality at source.”

Agenda, 14.06.2024

Time		
13.00 – 13.20	Welcome and introduction	Beat Weibel, Siemens
13.20 – 13.50	Business Models of patent offices	Prof. Dr. Christoph Ann, TU Munich
13.50 – 14.15	Why not completely searched and examined patents can do harm to innovation	Dr. Filip de Corte, Syngenta
14.15 – 14.40	Why the LiveScience industry needs valid and enforceable patents	Dr. Jörg Thomaier, Bayer
14.40 – 14.55	Break	
14.55 – 15.20	Why high-quality patents are needed for licensing in mobile communication	Gabriele Mohsler, Ericsson
15.20 – 16.00	Why courts and judges need to rely on completely searched and examined patents	Judge Tobias Pichlmaier, UPC
16.00 – 17.00	Q&A and panel discussion	ALL

Thank you for your attention



Beat Weibel
Siemens AG
Chief IP Counsel
Corporate Intellectual Property

Otto-Hahn Ring 6
81739 München
Germany

Phone: +49 (89) 636-48680
Fax: +49 (89) 636-1332053
Mobile: +49 (173) 41-59252

E-mail:
Beat.Weibel@siemens.com