

G 2/21: EPO Enlarged Board of Appeal Rules on Admissibility of Post-Published Evidence in Support of Inventive Step

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Background: Demonstration of Technical Effect for Inventive Step

Inventive step in the EPO is typically evaluated using the problem-solution approach, a conceptual model designed to standardize the assessment of inventive step while excluding inadmissible hindsight. The central hinge of this approach considers the technical effect of a claimed invention relative to the closest prior art, that is the technical effect attributable to the feature(s) by which the claim is novel. If this technical effect is demonstrated, then the objective technical problem – the problem which the notional skilled person is allowed to “know” when evaluating the prior art for obviousness – may be formulated ambitiously as providing the technical effect achieved. If no technical effect can be demonstrated, then the objective technical problem is typically formulated less ambitiously, as providing a mere alternative to the prior art. Since the likelihood of a claim being found inventive increases with the level of ambition of the formulated problem, the nature of the technical effect the applicant or patentee (collectively “Applicant”) is allowed to invoke often becomes a – if not the – major determinant of inventive character.

Invoking a technical effect often relies on evidence beyond that shown in the original application. Such supplementary data is sometimes made known after the effective filing date of the original application or patent (collectively “Application”), for example by subsequent publication and/or by filing with the EPO. This may result from the need for comparative experiments relative to a closest prior art unknown when drafting the Application, or from ongoing experiments completed only after filing. One question often raised in examination and opposition is therefore whether and, if so, to what extent the Applicant should be allowed to rely on such post-published evidence (“PPE”) to demonstrate a technical effect in support of inventive step when such PPE was not part of the Application.

Background of Referring Decision T116/18

In the appeal matter T116/18, EPO Technical Board of Appeal 3.3.02 considered questions like these. In view of conflicting holdings in existing EPO jurisprudence, it referred several questions of fundamental importance to the Enlarged Board of Appeal (EBoA) to clarify the circumstances under which the Applicant may admissibly rely on PPE in support of inventive step.

The first question of the referring Board in T116/18 sought clarification on whether PPE relied on to establish a technical effect may be considered at all when the technical effect in question rests exclusively on the PPE. This raised questions relating to the EPO's principle of free evaluation of evidence.

Also to be clarified in a second group of questions was the standard to be applied in taking PPE into account in support of inventive step. The referring Board accepted that, in any case, the relevant view will be that of the skilled person, and that this view would take into account common general knowledge available at the time of filing the Application, as well as the content of the Application itself. Beyond that, the Board picked up on and further developed the notion of plausibility of asserted technical effect, essentially discerning two currents in the existing case law, and framing their questions in the referral as a choice of two different types of plausibility in considering such PPE. Paraphrased, the referring Board asked whether PPE should be taken into account to support technical effect in support of inventive step:

- Only if the skilled person reasonably assumes that the technical effect is achieved (termed “*ab initio* plausibility”), or
- Always, unless the skilled person reasonably doubts that the technical effect is achieved (termed “*ab initio* implausibility”).

These were, in essence, the questions which the referring Board T116/18 put to the EBoA in October 2021. They were immediately recognized as being of fundamental importance to many cases in the EPO, both pending and granted. On March 23, 2023 the EBoA delivered its answer in the form of Opinion G2/21 (available [here](#); link current as of March 29, 2023).

The Holding of G2/21: The Main Points

The EBoA is aware of the central importance of its ruling to one of the primary material requirements of patentability. With this in mind, the EBoA has undertaken an extensive review of no fewer than 87 EPO decisions, as well as the practices and an additional 27 decisions of EPC contracting states in answering the referring Board's questions. Opinion G2/21 reads as a systematic mini-review of past jurisprudence relating to PPE. Anyone involved in the European patent system will profit from reading it.

In answering the first of the referring Board's questions, relating to disregarding PPE when it is the sole source of the asserted technical effect (and, by extension, touching on the principle of the EPO's free evaluation of evidence), the EBoA has held that free evaluation of evidence qualifies as a universally applicable principle for which there should be no exception here. In the EBoA's words:

*Evidence submitted by a patent applicant or proprietor to prove a technical effect relied upon for acknowledgement for inventive step of the claimed subject-matter may not be disregarded solely on the ground that such evidence, on which the effect rests, had not been public before the filing date of the patent ensued and was filed after that date.*¹

If PPE is not to be summarily refused consideration for the sole reason that it was submitted after the filing date of the Application, then what considerations *should* guide reliance on such evidence?

In answering this question, the EBoA took up the referring Board's notion of plausibility. Following the extensive legal review mentioned above, the EBoA rejected the referring Board's categorization of existing decisions according to *ab initio* plausibility or *ab initio* implausibility, holding that

*(t)he term "plausibility" that is found in the case law of the boards of appeal and relied upon by the referring board in questions 2 and 3 of the referral and reasons for it, does not amount to a distinctive legal concept or a specific patent law requirement under the EPC, in particular under Articles 56 and 83 EPC. It rather describes a generic catchword seized in the jurisprudence of the boards of appeal, by some national courts and by users of the European patent system.*²

Instead of such a categorization, the EBoA discerned a broader, common issue threading through past jurisprudence. This core issue is what the skilled person, operating on the basis of common general knowledge, understands on the filing date of the Application as the technical teaching of the claimed invention, or claimed subject-matter³. The EBoA identifies this core concept as the basic principle which should guide the Applicant's ability to rely on PPE in support of inventive step. As such, the EBoA reasoned that

*The relevant standard for the reliance on a purported technical effect when assessing whether or not the claimed subject-matter involves an inventive step concerns the question of what the skilled person, with the common general knowledge in mind, would understand at the filing date from the application as originally filed as the technical teaching of the claimed invention. The technical effect relied upon, even at a later stage, needs to be encompassed by that technical teaching and to embody the same invention, because such an effect does not change the nature of the claimed invention.*⁴

¹ G2/21, Headnote 1

² G2/21, item 92 of the reasons

³ G2/21, items 71 (for EPO case law, referring to the "claimed invention") and 87 (for case law of EPC contracting States, referring to the "claimed subject-matter") of the reasons

⁴ G2/21, item 93 of the reasons

This reasoning is excerpted in abbreviated form as Headnote 2 of G2/21:

A patent applicant or proprietor may rely upon a technical effect for inventive step if the skilled person, having the common general knowledge in mind, and based on the application as originally filed, would derive said effect as being encompassed by the technical teaching and embodied by the same originally disclosed invention.

It is this notion of technical teaching as recognized by the skilled person that serves as a reference point in considering whether or not the Applicant may rely on PPE for technical effect.

Interpretation and Conclusion

In many ways, the EBoA's combined holdings in G2/21 confirm – albeit while avoiding nuances of “plausibility” – many elements of EPO practice in the past years. Specifically, the relevant view for assessing questions of the admissibility of PPE remains that of the skilled person, with common general knowledge and the content of the Application in mind. Further, the relevant timepoint for that knowledge remains the effective filing date of the Application.

The holding of Opinion G2/21 suggests the following steps to determine whether an Applicant may rely on PPE in support of inventive step. The notional skilled person first identifies the technical teaching of the claimed invention in light of the Application and common general knowledge. Having established this technical teaching as a standard of comparison, one may then turn to the PPE to consider whether the content of that PPE, i.e. the technical effect relied upon in that PPE, is “encompassed by that technical teaching” and is also “embodied by the same originally disclosed invention”. If the answer to these questions is affirmative, then the technical effect relied on in the PPE does not change the nature of the claimed invention – relative to, one assumes, the technical teaching recognized in the Application – and might consequently be used to support inventive step. Conversely, if the answer is negative, then the technical effect purported in the PPE must be seen as changing the nature of the claimed invention – again, one assumes, relative to the technical teaching recognized in the Application – and might be excluded from further assessment of inventive step.

Answering one question often raises new ones, and this may turn out to be the case for one of the main holdings of G2/21. For instance, following a strict interpretation of the wording of Headnote 2, the EBoA establishes two conditions which must cumulatively (they are conjoined by “and”) be fulfilled in order for the Applicant to be able to rely on PPE in support of inventive step. Following Headnote 2, the skilled person must recognize the asserted technical effect in the PPE as being “encompassed by the technical teaching” and as being “embodied by the same originally disclosed invention”. Does the EBoA intend with this to establish a formal two-point test? If so, how exactly is the state of being “encompassed by the technical teaching” intended to differ from the state of being “embodied by the same originally disclosed invention”,

and what criteria should one apply in distinguishing one requirement from the other? Or are these two states simply offered as alternative descriptions of the same state, namely when a purported technical effect in PPE lies within the conceptual framework of the technical teaching of the Application and is not at odds with it?

Clearly, some interpretation will be necessary as the deciding bodies of the EPO implement the wording of G2/21 in subsequent decisions. In fact, the EBoA itself appears aware of this when it openly acknowledges “... *the abstractness of some of the aforementioned criteria*”.⁵

Yet the EBoA goes on to conclude that despite such abstractness,

... the guiding principles set out above should allow the competent Board of Appeal or other deciding body to take a decision on whether or not post-published evidence may or may not be relied upon in support of an asserted technical effect when assessing whether or not the claimed subject-matter involves an inventive step.

Following as it does at the end of an extensively reasoned opinion, the EBoA’s choice to conclude by referring to “guiding principles” seems significant in itself. In the EBoA’s rejection of formal categories of plausibility in favor of underlying technical teaching, for instance, one senses an attempt to reel in legal constructs run astray and instead return to technical common sense. Seen this way, the interpretive semantic questions posed above might actually illustrate the kind of constructed formalism the EBoA in G2/21 seeks to dispense with. In the end, the EBoA seems to be driving toward a core notion resting on basic principles: That patenting is ultimately about advancing technology, and the extent to which the skilled person recognizes such an advance in the Application should be the standard by which reliance on further data should be assessed when rewarding that enrichment.

⁵ G2/21, item 95 of the reasons