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Institute of Professional Representatives before the European Patent Office
Institut des mandataires agréés près l'Office européen des brevets

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The Enlarged Board of Appeal
Attention of Mr Nicolas Michaleczek (EBAamicuscuriae@epo.org)

30.11.2023

Amicus Curiae Brief filed on behalf of epi in respect of G 1/23

Dear Mr. Michaleczek,

The following *amicus curiae* brief is filed in accordance with Article 10 RPEBA on behalf of the Institute of Professional Representatives before the European Patent Office ("**epi**"). **epi** represents all 14,000 professional representatives from all the EPC member states. They represent a wide variety of users of the EPO, from individual inventors to multinational corporations.

epi presents this *amicus curiae* brief for the assistance of the Enlarged Board and would be pleased to provide any further explanation as would assist the Enlarged Board in considering the referred questions.

Citations from the relevant case law are provided in an Annex to this brief.

I. The Referral

This brief relates to the referral to the Enlarged Board in accordance with Article 112(1)(a) EPC by Board 3.3.03 by decision T 438/19. The referral has been assigned the number G 1/23.

The Board referred the following questions to the Enlarged Board of Appeal:

1. Is a product put on the market before the date of filing of a European patent application to be excluded from the state of the art within the meaning of Article 54(2) EPC for the sole reason that its composition or internal structure could not be analysed and reproduced without undue burden by the skilled person before that date?

2. If the answer to question 1 is no, is technical information about said product which was made available to the public before the filing date (e.g. by publication of technical brochure, non-patent or patent literature) state of the art within the meaning of Article 54(2) EPC, irrespective of whether the composition or internal structure of the product could be analysed and reproduced without undue burden by the skilled person before that date?

3. If the answer to question 1 is yes or the answer to question 2 is no, which criteria are to be applied in order to determine whether or not the composition or internal structure of the product could

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be analysed and reproduced without undue burden within the meaning of opinion G 1/92? In particular, is it required that the composition and internal structure of the product be fully analysable and identically reproducible?

II. Summary

In summary, **epi** is of the opinion that:

The answer to question 1 should be that, where it is not possible for the skilled person to ascertain the full composition or internal structure of a product that has been put on the market or otherwise made accessible for unrestricted analysis by the public and to reproduce the product without undue burden, then the full composition or internal structure of the product does not become part of the state of the art. However, any feature of the product which can be directly and unambiguously ascertained and reproduced without undue burden does become part of the state of the art.

The answer to question 2 is that technical information about a product which was made available to the public before the effective date (e.g. by publication of technical brochure) is part of the state of the art within the meaning of Article 54(2) EPC to the extent that that technical information is sufficiently disclosed.

In view of the answers to questions 1 and 2, question 3 does not need to be answered.

III. Admissibility of the Referral

epi agrees that there is a divergence of case law on this point and that it is a point of practical significance as a point of law and so considers that the referral is admissible.

IV. Reasoning behind the Referring Decision

The following extracts from the Reasons of the referring decision (T 438/19) set out the main reasons for the referral.

> 10.4 […] it would […] appear that the expression "available to the public" in Art. 54(2) EPC was intended to express the possibility of the public to take note of the prior art, i.e. the accessibility to the public of the prior art, without any requirement as to its enablement The requirement to reproduce the product without undue burden in section 1.4 of the Reasons of opinion G 1/92 would appear to go beyond the intended meaning of "available to the public" in Art. 54(2) EPC.
>
> 10.5 This could be seen to imply that any element of the composition or internal structure of a product put on the market which can be discovered by the skilled person per analysis is state of the art within the meaning of Art. 54(2) EPC, irrespective of the reproducibility of the product by the skilled person.

11. In the case law of the Boards of Appeal, diverging approaches have been adopted in applying opinion G 1/92. The present Board has identified divergent decisions with regard to the following aspects:

(i) interpretation of "available to the public" leading to the exclusion from the state of the art within the meaning of Article 54(2) EPC of the product itself (including its chemical composition/internal structure) or only of its chemical composition/internal structure,

(ii) the degree of detail required for the analysis of said product and

(iii) the requirements for its reproducibility.

[…]

12. The Boards have reached diverging conclusions when it was found that the product put on the market could not be analysed or reproduced, deciding either that (a) its chemical composition (or internal structure) was not state of the art (T 946/04, reasons 3.31; T 1666/16 reasons 11), i.e. adopting the wording of the conclusion of opinion of G 1/92, or that (b) the product itself was not state of the art, thus including its chemical composition or internal structure (T 370/02 reasons 8.8; T 2045/09 reasons 29 to 39; T 1833/14 reasons 1.9 and 1.10; T 23/11 reasons 2.5) based on the wording in point 1.4 of the Reasons for opinion G 1/92.

12.1 While the difference may seem of theoretical interest at first sight, it may lead in practice to significantly different conclusions. As a direct example related to the present case, if in application of opinion G 1/92 a product is not state of the art pursuant to Art. 54(2) EPC, that product cannot be used as starting point for assessing inventive step.

If the conclusion is only that its composition is not state of the art, but the product itself is still state of the art as commercially available, it could be used as a starting point for the assessment of inventive step, should technical information about that product reported in documents of the state of the art, including its potential uses and advantages, make it of particular interest for the skilled person. This is the case in the present appeal, as the commercial product ENGAGE® 8400 is shown in the examples of D1 to be suitable for the same purpose as the present invention, namely as an encapsulating material for solar cells and solar cell modules.

[…]

24. From the above, it can be seen that opinion G 1/92 has given rise to diverging interpretations by the Boards of Appeal over the past 30 years, leading to legal uncertainties when it comes to assessing what constitutes state of the art within the meaning of Article 54(2) EPC in relation to a commercially

available product. This results in the need to refer a number of questions to the Enlarged Board of Appeal, both to ensure uniform application of the law and because points of law of fundamental importance have arisen. A decision as to under which conditions for a product put on the market before the filing date, as is the case for ENGAGE® 8400, the product itself and partial information about its composition published prior to the filing date is state of the art within the meaning of Article 54(2) EPC is relevant to the present case, as the possibility to use such a product in the analysis of inventive step is decisive to determine the outcome of the case. In addition, the diverging interpretations made of G 1/92 are of considerable practical relevance in a large number of cases as illustrated by the various decisions mentioned above, and a mere theoretical importance is excluded.

V. The Questions

In view of the parts of the referring decision set forth above, it is understood that question 1 asks whether, if a product is insufficiently disclosed, is it totally removed from the state of the art or are only the features of the product which are insufficiently disclosed excluded from the state of the art. The referring Board suggested that the relevance of the question may especially be seen in whether the product, even though it cannot be reproduced, can play a role when assessing inventive step of a later invention.

To put this in context, Article 54(2) EPC indicates that:

> The state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application.

Thus, "everything" that is "available to the public" by a disclosure in any way is part of the state of the art. On this basis alone, it cannot be seen how a product which has been made available to the public, even if it has only been exhibited in a sealed glass case, cannot be a part of the state of the art. Even in that case, the public can ascertain at least the external features of the product. In particular, if a product is freely available to the public because it has been put on the market, it must be a part of the state of the art to the extent that it can be analysed and reproduced. Thus, any feature of a product which can be ascertained by inspecting and analysing the product, such as ENGAGE® 8400, which has been put on the market, must be a part of the state of the art.

For instance, let us assume that a product, which later analysis shows contains a compound X, is put on the market.

One possibility is that, at the relevant date, it was not possible to identify what compound X is by the means available to the skilled person at the relevant date. Compound X is thus not disclosed and so does not become part of the state of the art.

A second possibility is that compound X can be identified but cannot be made by the methods available to the skilled person. Thus, it is not disclosed in an enabling manner and so cannot destroy the novelty of a later claim.

A third possibility is that compound X has three structural parts and that the structures of parts 1 and 2 can be ascertained and they can be reproduced without undue burden, while part 3 cannot. In this case, the product and its partial internal structure must be part of the state of the art for any later claim to a product containing a compound which comprises parts 1 and 2.

If the ascertainable and reproducible aspects[1] of the product were "removed" from the state of the art simply because some other aspect of the product could not be ascertained or reproduced, this would mean that later filed patents could take away from the public information which was previously made available to it in an enabling manner. This cannot be the intention.

Let us assume that the product containing compound X had been put on the market on the basis of disclosures made before the relevant date that the product is effective in treating acne. On this basis, buyers of the product can use the product. On the basis of this use, they find that it is an effective treatment for acne. Moreover, as the product can be tested as a treatment for acne, the fact that the product has an effect as a treatment for acne is also part of the state of the art. As an effect is also a technical feature (G 2/88), this technical effect also becomes part of the state of the art. The fact that it is not possible to ascertain what compound X is and/or to make compound X without undue burden cannot remove the product as such and any effects which are known to be produced by the product from the state of the art as this would be contrary to Article 54(2) EPC.

If the identity of compound X is not disclosed and cannot be ascertained and/or reproduced, the product cannot be novelty destroying for any later properly-enabled claim to a product containing compound X for treating acne. However, as the product was made available to the public and it was made available to the public that the product is an effective treatment for acne, the product could be relevant in assessing inventive step of any later properly-enabled claim. For example, if the technical information mentions that the product contains an extract or lysate of an unavailable (not deposited) strain of a certain microbial species, how could it be conceivable to remove such information from the assessment of the inventive step of a later claim directed to a product containing an extract or lysate of another strain of that microbial species, merely because the specific strain included in the marketed product has not been made available?

As any public disclosure before the effective date is part of the state of the art, any test results and any other technical information about the product, such as a technical brochure, which was made available to the public

[1] In the first possibility, the fact that the product exists, in the second possibility, the fact that the product contains compound X and, in the third possibility, the fact that compound X has three components and that two of the three components can be ascertained and reproduced.

before the relevant date, is part of the state of the art within the meaning of Article 54(2) EPC. Hence, when using the product, which is known as a treatment for acne, as the closest prior art in assessing inventive step of a later claim, the problem-solution approach will be based on the technical effects of the technical features which distinguish the later claim from the ascertainable and reproducible aspects of the earlier product. Thus, the fact that a product is not sufficiently disclosed in respect of all its features does not take away its usefulness as the closest prior art or a secondary document in the problem-solution approach and so it should not be removed from the state of the art.

As a further example, consider a device which was on public display in a sealed glass case and was labelled as a device for breaking up rocks. Because of the way the device was displayed, the skilled person would have been able to ascertain all the external features of the device but would not have been able to ascertain how those external features were driven. For instance, all the external features may be controlled by an embedded electronic controller. If the person who had devised the device later applied for a patent for that device, the public display of the device would not have destroyed the novelty of a later claim to the device[2] including the embedded electronic controller. However, the displayed device would serve as the closest prior art and the objective technical problem would be to devise a means from driving the device. Again, a disclosure which only fails to disclose one of many features should not be totally excluded from the state of the art as this would expose the public to the risk of later-filed patents covering entirely obvious modifications of subject matter which was already made available to it.

From these examples, it is considered that the answer to question 1 is that, where it is not possible for the skilled person to discover the full composition or internal structure of a product that has been put on the market or otherwise made accessible for unrestricted analysis by the public and to reproduce the product without undue burden, then the full composition or internal structure of the product does not become part of the state of the art. However, any feature of the product[3] which can be directly and unambiguously ascertained and reproduced without undue burden do become part of the state of the art. Thus, a product that has been as such put on the market does not "disappear" from the state of the art completely just because it is not possible to ascertain its full composition or internal structure.

The answer to question 2 is that technical information about a product which was made available to the public before the effective date (e.g. by publication of a technical brochure) is part of the state of the art within the meaning of Article 54(2) EPC to the extent that that technical information is sufficiently disclosed. As long as a skilled person is able to make a product which embodies a technical feature[4] disclosed in the technical

[2] The claim would only be allowable if the description disclosed in an enabling manner how to drive the visible features of the device.
[3] Such a feature may be, for instance, an aspect of its composition or internal structure, which may be defined in terms of properties or statistical parameters at a macroscopical level which relate to the composition or internal structure.
[4] See footnote 3.

information, that feature is part of the state of the art. Similarly, as long as a skilled person is able to make a product which embodies a combination of technical features disclosed in the technical information, that combination is part of the state of the art. Additionally, any extrinsic characteristics of the product, in the sense of G 1/92, reasons 3, disclosed by the technical information are part of the state of the art. Whether the technical information discloses or makes obvious a causal relationship between any particular technical feature disclosed in the technical information and the disclosed extrinsic characteristics of the product is an inquiry under Article 54 or 56 EPC, respectively.

VI. Conclusion

The answers to questions 1 and 2 should be as set out in the Summary above. In view of the answers to questions 1 and 2, question 3 does not need to be answered.

If the Enlarged Board would like any further explanation of the points made above, **epi** will be pleased to supply it.

Yours faithfully,

Peter R. Thomsen
President

Annex - Relevant Case Law

Reference is made to G 1/92 "Availability to the public". G1/92 provides that:

> Where it is possible for the skilled person to discover the composition or the internal structure of the product and to reproduce it without undue burden, then both the product and its composition or internal structure become state of the art.

This is effectively the same as the answer to question 1 given above.

The Headnotes to G 1/92 state:

> 1. The chemical composition of a product is state of the art when the product as such is available to the public and can be analysed and reproduced by the skilled person, irrespective of whether or not particular reasons can be identified for analysing the composition.
>
> 2. The same principle applies mutatis mutandis to any other product.

G 1/92 also states in its Reasons:

> 1.4 An essential purpose of any technical teaching is to enable the person skilled in the art to manufacture or use a given product by applying such teaching. Where such teaching results from a product put on the market, the person skilled in the art will have to rely on his general technical knowledge to gather all information enabling him to prepare the said product. Where it is possible for the skilled person to discover the composition or the internal structure of the product and to reproduce it without undue burden, then both the product and its composition or internal structure become state of the art.
>
> 2.1 The introduction of such an additional requirement [that the public should have particular reasons for analysing a product put on the market, in order to identify its composition or internal structure] would remove a commercially available and reproducible product from the public domain. It would mean an unfounded deviation from the principles applied in respect of the other sources of the state of the art as defined in Article 54(2) EPC and it would obviously represent an element of subjectivity leading to uncertainty in applying the concept of novelty as defined in this Article.
>
> It may be added that a commercially available product per se does not implicitly disclose anything beyond its composition or internal structure. Extrinsic characteristics, which are only revealed when the product is exposed to interaction with specifically chosen outside conditions, e.g. reactants or the like, in order to provide a particular effect or result or to discover potential results or capabilities, therefore point beyond the product per se as they are dependent on deliberate choices being made. Typical examples are the application as a pharmaceutical product of a known substance or composition (cf. Art.

54(5) EPC) and the use of a known compound for a particular purpose, based on a new technical effect (cf. G 2/88). Thus, such characteristics cannot be considered as already having been made available to the public.

G 2/88 states in its Reasons:

> 10. The word "available" carries with it the idea that, for lack of novelty to be found, all the technical features of the claimed invention in combination must have been communicated to the public, or laid open for inspection."
>
> 10.3 The attaining of such a technical effect should then be considered as a functional technical feature of the claim (e.g. the achievement in a particular context of that technical effect).

This is consistent with considering that what is available from a product is the set of features (including effects) that can be recognized (sufficiently disclosed, explicitly or implicitly, but not inherent hidden features) from the product, but not those that were hidden or unrecognized. Hence, G 2/88 is consistent with our answer to the first question.

G 2/88, Reasons 10 states that:

> 10. The word "available" carries with it the idea that, for lack of novelty to be found, all the technical features of the claimed invention in combination must have been communicated to the public, or laid open for inspection. In the case of a "written description" which is open for inspection, what is made available in particular is the information content of the written description. […] In each such case, however, a line must be drawn between what is in fact made available, and what remains hidden or otherwise has not been made available. In this connection the distinction should also be emphasised between lack of novelty and lack of inventive step: information equivalent to a claimed invention may be "made available" (lack of novelty), or may not have been made available but obvious (novel, but lack of inventive step), or not made available and not obvious (novel and inventive). Thus, in particular, what is hidden may still be obvious.
>
> 10.1 […] the Enlarged Board would emphasise that under Article 54(2) EPC the question to be decided is what has been "made available" to the public: the question is not what may have been "inherent" in what was made available (by a prior written description, or in what has previously been used (prior use), for example).Under the EPC, a hidden or secret use, because it has not been made available to the public, is not a ground of objection to validity of a European patent. In this respect, the provisions of the EPC may differ from the previous national laws of some Contracting States, and even from the current national laws of some non-Contracting States. Thus, the question of "inherency" does not arise as such under Article 54 EPC. Any vested right derived from prior use of an invention is a matter for national law

(see, in this connection, e.g. Article 38 of the Community Patent Convention, not yet in force). Furthermore, as to the suggested problems concerning infringement referred to above, it is to be noted that analogous problems would result from G 1/83 in the medical area.

10.3 […] With respect to a claim to a new use of a known compound, such new use may reflect a newly discovered technical effect described in the patent. The attaining of such a technical effect should then be considered as a functional technical feature of the claim (e.g. the achievement in a particular context of that technical effect). If that technical feature has not been previously made available to the public by any of the means as set out in Article 54(2) EPC, then the claimed invention is novel, even though such technical effect may have inherently taken place in the course of carrying out what has previously been made available to the public.

G 2/21, Reasons states that:

90. The principle of free evaluation of evidence depicts a universally applicable principle of both procedural and substantive law in assessing any means of evidence submitted by a party in proceedings under the EPC.

93. 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.

94. Hence, 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 consider said effect as being encompassed by the technical teaching and embodied by the same originally disclosed invention.

Hence, G 2/21 also puts emphasis on what the skilled person, with the common general knowledge in mind, would understand at the relevant date from an original disclosure (the application as originally filed) as the technical teaching of the original disclosure (the claimed invention). Thus, the prior art effect of a disclosure extents to what the skilled person understands – anything within that extent is disclosed and forms part of the state of the art; anything outside that extent is not disclosed and not part of the state of the art. This is consistent with the answer given to question 1 above.

G 2/21 states:

Headnote I. Evidence submitted by a patent applicant or proprietor to prove a technical effect relied upon for acknowledgement of 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 in suit and was filed after that date.

Headnote II. 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.

Reasons 73. As noted in points 11 and 12 above, the referred questions do not require an answer to the issue of sufficiency of disclosure and Article 83 EPC. However, as the terminological notion of plausibility relied upon by the referring board in questions 2 and 3 of the referral and the reasons for it is mainly to be found in the case law of the boards of appeal with regard to the patentability requirement of sufficiency of disclosure, the Enlarged Board accepts the appropriateness of a comparative analysis and comparative considerations in this regard.

Reasons 74. While the issues of sufficiency of disclosure (Article 83 EPC) and inventive step (Article 56 EPC) and their assessment are clearly to be treated separately and on their own, as correctly pointed out by the referring board in point 13.3.1 of the Reasons of the referring decision, the Enlarged Board is aware of the case law in particular concerning second medical use claims where the notion of "plausibility" has been used. For such claims, the issue of reliance on post-published evidence for a purported technical effect arises in particular in the context of sufficiency of disclosure. Indeed, a technical effect, which in the case of for example a second medical use claim is usually a therapeutic effect, is a feature of the claim, so that the issue of whether it has been shown that this effect is achieved is a question of sufficiency of disclosure under Article 83 EPC. Hence, because the subject-matter of second medical use claims is commonly limited to a known therapeutic agent for use in a new therapeutic application, it is necessary that the patent at the date of its filing renders it credible that the known therapeutic agent, i.e. the product, is suitable for the claimed therapeutic application. The Enlarged Board explained the legal and historical background to the patentability of further medical uses in its decision G 2/08.

Reasons 88. As already mentioned in points 55 to 59 above, the proceedings under the EPC are governed by the principle of free evaluation of evidence which is also known in various EPC Contracting States with a civil law system.

Reasons 89. The principle of free evaluation of evidence depicts a universally applicable principle of both procedural and substantive law in assessing any means of evidence submitted by a party in

proceedings under the EPC, be it an administrative department of the EPO or a board of appeal as the competent judicial body reviewing decisions of such administrative departments pursuant to Article 106(1) EPC.

Reasons 90. As the principle of free evaluation of evidence is enshrined in the right of each party to proceedings under EPC to give evidence in appropriate form pursuant to Articles 113(1) and 117(1) EPC, it may not be used to disregard evidence per se insofar as it is submitted and relied upon by a party in support of an inference which is challenged as to its plausibility and is decisive for the final decision.

Reasons 91. Hence, evidence submitted by a patent applicant or proprietor to prove a purported technical effect relied upon for acknowledgement of inventive step of the claimed subjectmatter 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 in suit and was filed after that date.

Reasons 92. The 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 the reasons for it, does not amount to a distinctive legal concept or a specific patent law requirement under the EPC, in particular under Article 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.

Reasons 93. 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.

Reasons 94. Hence, 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 consider said effect as being encompassed by the technical teaching and embodied by the same originally disclosed invention.

Reasons 95. The Enlarged Board is aware of the abstractness of some of the aforementioned criteria. However, apart from the fact that the Enlarged Board, in its function assigned to it under Article 112(1) EPC, is not called to decide on a specific case, it is the pertinent circumstances of each case which provide the basis on which a board of appeal or other deciding body is required to judge, and the actual outcome may well to some extent be influenced by the technical field of the claimed invention. Irrespective of the actual circumstances of a particular case, 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.