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**Datasheet for the decision
of 2 July 2025**

Case Number: G 0001/23

Appeal Number: T 0438/19-3.3.03

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C09D123/08

Language of the proceedings: EN

Title of invention:

SOLAR CELL SEALING MATERIAL, AND SOLAR CELL MODULE

Patent Proprietors:

Mitsui Chemicals, Inc.

Mitsui Chemicals ICT Materia, Inc.

Opponent:

Borealis GmbH

Headword:

Interpretation of G 1/92 (enablement requirement for products put on the market for forming part of the state of the art within the meaning of Articles 54(2) and 56 EPC)

Relevant legal provisions:

EPC Art. 54(2), 56, 83, 112(1), 117(1) (f)

RPEBA Art. 9, 10

Keyword:

Admissibility of referral - yes

Product put on the market - requirement of reproducibility for prior art status under Article 54(2) and 56 EPC - no

Not reproducible properties taken into account for novelty and inventive step - yes

Decisions cited:

G 0002/88, G 0006/88, G 0001/92, G 0002/03, T 0206/83,
T 0952/92, T 1553/06, T 1833/14, T 0023/11, T 0438/19

Headnote:

- I. A product put on the market before the date of filing of a European patent application cannot 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 by the skilled person before that date.
- II. Technical information about such a product which was made available to the public before the filing date forms part of the state of the art within the meaning of Article 54(2) EPC, irrespective of whether the skilled person could analyse and reproduce the product and its composition or internal structure before that date.



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Case Number: G 0001/23

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Referring decision:

Interlocutory decision T 0438/19 of the
Technical Board of Appeal 3.3.03 of the
European Patent Office dated 27 June 2023

Composition of the Board:

Chairman: C. Josefsson
Members: I. Beckedorf
T. Bokor
M. Teppey
Y. Ruedi
P. Gryczka
G. Pricolo

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Summary of facts and submissions

- I. By interlocutory decision T 0438/19 of 27 June 2023 ("the referring decision"), Technical Board of Appeal 3.3.03 ("the referring Board") referred the following questions of law to the Enlarged Board of Appeal:

Question 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?

Question 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?

Question 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 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?"

Summary of the Appeal Proceedings / the Referring Decision

- II. The appeal by the opponent before the referring Board was against the decision of the Opposition Division, which rejected the opposition against the European patent No. 2 626 911, (application No. 12830390.8). The Division found that the subject-matter of claim 1, relating to an encapsulating material for solar cell, involved an inventive step. The closest prior art was the commercially available product "ENGAGE® 8400". Certain properties of ENGAGE® 8400 were demonstrated by various pieces of technical documentation.
- III. The product ENGAGE® 8400 is a complex polymer. It was undisputed between the parties that the method for manufacturing it exactly was not in the public domain, or that the exact reproduction of a complex polymer is not a straightforward exercise, even if the material, i.e. the final product itself, is available to the skilled person for analysis. The opponent only argued that the skilled person could make a product sufficiently similar to ENGAGE® 8400, and an exact reproduction could not have been intended by opinion G 1/92 (cf. T 0438/19, Reasons 3.3 and 3.4).
- IV. The commercially available character of ENGAGE® 8400 was undisputed, but the parties disagreed as to whether the product was to be considered as belonging to the state of the art for the purposes of inventive step. The respondent patent proprietor counter-argued that the commercial product ENGAGE® 8400 had not been made available to the public within the meaning of

Article 54(2) EPC, having regard to the rationale of the opinion of the Enlarged Board of Appeal G 1/92 (OJ EPO 1993, 277). Put differently, the ENGAGE® 8400 product was simply not part of the state of the art because it could not be exactly reproduced.

- V. In the following, the formal legal term "state of the art" within the meaning of Article 54(2) and 56 EPC will also be referred to as "prior art", the commonly used shorter term for the same concept. Also, the requirement of the reproducible prior art will also be referred to as the enablement requirement. Here this term is used solely in the context of the expected reproducible character of a disclosure for the purposes of Article 54(2) EPC, i.e. the prior art. Enablement within the meaning of Article 83 EPC is not treated in this decision.
- VI. The opponent submitted that irrespective of the extent to which the ENGAGE® 8400 polymer could be reproduced, certain properties of that material that were relevant for the claimed subject-matter together with the product itself had been put in the public domain. Such publicly available information concerning a commercially available product should not be disregarded on the basis that the specific commercial material could not be reproduced, whether exactly or only in respect of certain properties.
- VII. The parties also disagreed as to whether the various technical documentation relating to the ENGAGE® 8400 polymer were prior art. The patent proprietor argued that also these had to be excluded from the state of the art, given that the product they related to was not reproducible. The opponent argued that measurable or disclosed features of a known material were not

invisible to the skilled person, just because they were measured on or disclosed in connection with a commercially available material which the skilled person could not prepare themselves.

VIII. The referring decision concluded that the commercially available product ENGAGE® 8400 would prejudice inventive step if it could be seen as belonging to the state of the art (Reasons 7, last sentence). Accordingly, it had to be determined whether the product formed part of the prior art, which in turn required a proper interpretation of opinion G 1/92 (Reasons 7).

Course of proceedings before the Enlarged Board

IX. The President of the EPO ('EPO President') was invited to comment on the referral, and third parties were given the opportunity to file submissions under Articles 9 and 10 of the Rules of Procedures of the Enlarged Board of Appeal (RPEBA). Their submissions were forwarded to the parties.

X. The EPO President submitted that the enablement requirement was not derivable from the EPC, neither by literal, systematic nor historic interpretation (points 56, 57 and 60 of the EPO President's comments), and was explicitly rejected by the legislator (point 31). Otherwise the EPO President did not question the EPO case law following G 1/92 which maintained the enablement requirement (point 34) and even acknowledged that this was also reflected in the Guidelines (point 13). The EPO President submitted that a prior art disclosure was always to be judged in view of the totality of the circumstances and the available means

and evidence, following G 2/88 (points 64 to 66, 68, 69), instead of formally and categorically excluding it as belonging to the state of the art within the meaning of Articles 54(2) and 56 EPC.

- XI. The EPO President argued that the answer to Question 1 should be 'No'. A successful analysis of the product meant that not only the product but also the composition had become part of the state of the art. Given that G 1/92 did not wish to exclude publicly available information from the state of the art, the statements made in Reasons 1.4 and 2.1 merely intended to emphasise that the product was already part of the state of the art (point 48). The level of detail of disclosure in the prior art was irrelevant (point 70), from which it should follow that the product put on the market forms part of the prior art, apparently quite irrespective of whether it was reproducible in part or in its entirety. Thus, the EPO President in fact proposed a third interpretation of G 1/92, in effect suggesting that the explicit requirement of reproducibility of the product in the answer of G 1/92 should be disregarded.
- XII. The opponent argued that the skilled person would not disregard technical information that was available to them through analysis, only because it may not be able to reproduce the product from which the information was derived. For example, imagining that Coca-Cola was not known and could not constitute prior art would be manifestly unreasonable.
- XIII. The patent proprietor maintained its position that the non-enabled product is to be excluded from the prior art in its entirety. The argument in support of this

interpretation is essentially as follows: T 206/83 established that a disclosure in a document for the purposes of Article 54(2) and (3) EPC must be enabling in the same manner as a patent application for the purposes of Article 83 EPC. As a consequence, T 206/83 found that a non-enabled teaching in a document meant that the disclosure of the document was not relevant for the state of the art for the purposes of Article 54(2) EPC. This decision was never questioned in the case law. G 1/92 confirms this principle for a non-enabled product, also according to the principle that all types of state of the art (documentary, oral, prior use disclosure) are to be treated equally. In that light, it is a natural reading of the Enlarged Board's answer in G 1/92 that a product put on the market will only be considered as belonging to the state of the art if the product is reproducible. It is unproblematic and even equitable that this may lead to the later patenting of products that have been put on the market, because the inventor first disclosing the manufacturing method of the previously non-reproducible product deserves a reward.

- XIV. Fifteen *amicus curiae* submissions (Article 10 RPEBA) were filed by several professional associations, companies and private persons. The majority of them supported the view that a commercially available product cannot be excluded from the prior art. As a notable exception, AIPPI proposed to answer Questions 1 and 2 with yes and no, respectively. None of them questioned the enablement requirement for documentary and oral disclosures. Some submissions declined to answer the questions directly but suggested to reformulate them. CIPA and the IP Federation suggested that the Enlarged Board should provide guidance on the

requirement of "without undue burden". One late submission was received well after the time limit for the filing of such submissions.

- XV. The Enlarged Board issued its preliminary opinion in a communication dated 16 August 2024, stating that there did not appear to be a legal basis in the EPC for the enablement requirement as interpreted by the case law from G 1/92 for either of the proposed interpretations. The enablement requirement established a legal fiction that would lead to absurd results when applied consistently. The first two questions were to be answered as "No" and "Yes", respectively, the third question being moot. The parties and the EPO President were given an opportunity to comment on the Enlarged Board's preliminary opinion.
- XVI. The opponent and the EPO President largely agreed with the provisional opinion. The patent proprietor disputed the Enlarged Board's findings and the underlying reasons.
- XVII. Oral proceedings were held before the Enlarged Board on 12 March 2025. At the end of the oral proceedings the Chairman stated that the decision will be issued in writing.

Reasons for the decision

1. Admissibility of the referral

1. Article 112(1) EPC provides that:
"In order to ensure uniform application of the law, or if a point of law of fundamental importance arises:

(a) the Board of Appeal shall ... refer any question to the Enlarged Board of Appeal if it considers that a decision is required for the above purposes. ...

(b) ..."'

2. There is nothing in the file that speaks against the admissibility of the present referral. At first sight, the question may appear to be technical, but at the heart of the matter is a presumed legal requirement of the enabling disclosure. Put differently, the issue can also be formulated as whether the argued requirements of Article 83 EPC are indeed implicitly part of the term "made available to the public" within the meaning of Article 54(2) EPC, and thereby also flow into the application of Article 56 EPC through the common concept of the "state of the art". The question is not about having physical access to the product, as a question of fact, but rather whether it is accessible to the skilled person, in the sense that the skilled person can take the product into account as part of the state of the art, as a question of law. The state of the art is a cornerstone of the examination in the overwhelming majority of cases, and the referral concerns the legal boundaries of the state of the art. A point of law can be one of fundamental importance even without any conflicting case law (G 4/19, Reasons 12). Thus, there is no doubt that the referral concerns a question of law of fundamental importance.

3. In the present case the referring decision also correctly identified that the case law is not uniform. The non-uniformity here is not apparent as two distinct and diametral opposing lines of case law, but rather as a relatively wide spectrum of how the decisions over the years have interpreted the reproducibility

requirement of G 1/92. Reference is made to the three main aspects in Reasons 11 of the referring decision.

The number of decisions explicitly discussing the enablement requirement may not appear to be very high, but the necessity to ensure the uniform application of the law may also arise without a high number of conflicting cases (G 1/11, Reasons, point 1.).

4. The Enlarged Board also accepts that an answer to the referred questions is necessary for the decision of the referring Board (T 0438/19, Reasons 7). It is not for the Enlarged Board to enter into the substantive assessment of the matter, in particular to make an assessment of the inventiveness of the claimed subject-matter in view of the ENGAGE® 8400 polymer as a potential prior art.
5. The Enlarged Board is satisfied that the referral meets the requirements of Article 112 (1) (a) EPC and it is admissible.

2. On the merits of the referral

2.1. The opinion G 1/92 and its interpretation

6. The referral by the EPO President leading to the opinion G 1/92 was originally directed at a question which has no immediate bearing on the present referral. It concerned the question whether the skilled person needs particular reasons to analyse the chemical composition of a product put on the market, in order for the composition to become part of the state of the art in the sense of Article 54(2) EPC (G 1/92, Summary of the Procedure, I.). The issue of the reproducibility of the product was not raised by the EPO President. The referral mentioned "products available to the public",

but it is clear that the term 'products available' refers to products that have been made available through prior use, i.e. physical, tangible products. There is no relevant difference to a "product put on the market" addressed in the present referral.

7. G 1/92 answered the referred question as follows, taking up the condition of the reproducibility in addition to the original assumption that the skilled person was able to analyse the product: "*The chemical composition of a product is [part of the] 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.*" (Headnote 1, emphasis added).
8. In this manner, the answer of G 1/92 gave rise to two separate legal issues. It confirmed that properties of products will belong to the state of the art, also without any specific motivation to analyse a property. Additionally, it was interpreted in the case law as setting up the requirement that a product put on the market needs to be reproducible in order to be an item of the prior art. The present referral is directed at this second issue only.
9. G 1/92 states that the same requirements apply to any kind of disclosure, cf. Reasons 1.2: "*It should also be noted that Article 54(2) EPC does not make any distinction between the different means by which any information is made available to the public. Thus, information deriving from a use is governed in principle by the same conditions as is information disclosed by oral or written description*" and Reasons

1.4, first sentence: "*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*" (emphasis added).

10. There seems to be a general agreement that any interpretation of the reproducibility requirement of G 1/92 is primarily to be derived from those parts where this requirement is explained, even if briefly (Reasons 1.3 and 1.4):

"1.3 The Enlarged Board of Appeal considers it appropriate to make first some general remarks on the kind of information which can be derived from the public use of products for the purpose of the application of the requirement "made available to the public" in Article 54(2) EPC.

*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 **[1] to discover the composition or the internal structure** of the product and **[2] to reproduce it without undue burden**, then **both** the product and its composition or internal structure become state of the art."* (emphasis, numbering in square brackets and underlining added). At this point, the question arises as to what the underlined "it" may refer to.

11. It transpires from Reasons 1.3 that the statements in Reasons 1.4 are presented as a general introduction before the actual question of the EPO President is addressed. In this manner they are not necessarily limited to the more specific situation of the referral, i.e. where the state of the art under examination is a product put on the market. It is first at points 2 and 2.1 of the Reasons where G 1/92 turns to the original question, the first legal issue, cf. points 6. and 8. above. In this context G 1/92 makes a further statement that also seems to have a bearing on the present referral: "*The introduction of such an additional requirement 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*" (Reasons 2.1, underlining added).
12. In the present referral the crucial point is the explicitly stated requirement in the answer of G 1/92 that the product must be reproducible. Nothing in G 1/92 supports that this is to be ignored. The above mentioned statement in Reasons 1.4 that "*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*" makes it quite clear that the skilled person must make an attempt to prepare the product, so that the enablement of the product seems a decisive issue for the Enlarged Board. The formulation that the skilled person "must

gather all information" with the help of its general knowledge leads away from the interpretation that the skilled person can just obtain the product from the market when needed.

13. Taking into account the repeated mention of the reproduction of the product and its undeniable significance for the Enlarged Board, one possible reading of the last sentence of Reasons 1.4 is as follows: Where it is possible for the skilled person [1] to discover the composition or the internal structure of the product and [2] to reproduce the product without undue burden, then both the product and its composition or internal structure become part of the state of the art.
14. There is also another reasonable reading, taking into account that the original referral was directed at the question whether the composition became prior art, and therefore the problem of the analysis and reproduction of the product could be understood to reside solely in the analysis and reproduction of the composition. With this in mind, the following reading also makes sense: Where it is possible for the skilled person [1] to discover the composition or the internal structure of the product and [2] to reproduce the composition or internal structure without undue burden, then both the product and its composition or internal structure become part of the state of the art. Accordingly, the emphasis is now on the reproducibility of the composition, which in turn may lead to the conclusion that it was only the prior art status of the composition that was in question from the outset, but not that of the product. This in turn may lead more or less directly to the conclusion that if anything is to

be excluded from the state of the art, it must be the property that caused the problem in the first place, the non-reproducible composition.

15. Depending on whether reproduction of the product or the composition is seen to be the focus of G 1/92, it is then tempting to make inferences on the lacking prior art status of either the product or only that of the composition from the various statements of G 1/92 accordingly. In summary, at least on the basis of a purely grammatical interpretation, the two possible interpretations of G 1/92 suggested by the referring Board (Reasons 11, (i)) are both plausible. Thus, the Enlarged Board interprets the referred questions with this understanding of the opinion G 1/92.

2.2. Question 1, scope and interpretation

16. The first question is the decisive question of the referral. The answer to it is expected to clarify whether the first or second interpretation as found in the case law is correct (Reasons 11(i), cf. points 13. and 14. above).
17. It is the understanding of the Enlarged Board that, for its decision, the referring Board needs to know whether according to a correct interpretation of the case law it is the not analysable and reproducible product that is to be excluded from the prior art *per se*, as if by way of a legal fiction, or whether G 1/92 only meant that while the composition of the product did not become part of state of the art, the product itself would still firmly belong to the state of the art (and

as such potentially disclosing all of its other features that were themselves analysable and reproducible). Here and in the following, whenever the reproduction of the composition of a product is mentioned, it is understood that "composition or internal structure" is meant, wherever applicable, in line with the Headnote II and the overall reasons of G 1/92.

18. However, Question 1 is not restricted to choosing one of the two proposed interpretations of the referring Board. It can also be answered by examining the perceived lack of legal basis for the enablement requirement, as indicated by the referring Board in Reasons 10.4. Alternatively, it can be answered on the basis of the interpretation suggested by the EPO President (cf. point XI. above).
19. The product itself was not formally introduced in the proceedings, e.g. as a piece of physical evidence for the purposes of an inspection within the meaning of Article 117(1)(f) EPC, but as an embodiment mentioned in document D1. This circumstance does not appear relevant for the referral. The question of the reproducibility of a commercially available product would in all likelihood have been the same if the product itself had been directly relied upon from the outset. The Board directly identified the product itself as the potential closest prior art for the question of inventive step. The prior art status of document D1 is not questioned in the referring decision. In fact, also the patent proprietor argued that the proper prior art is the generic disclosure of D1.

20. In order to fully understand the issues relevant to the referral, it is useful to clarify how the Enlarged Board reads some relevant terms of the referred questions.
21. For ease of reading, Question 1 is repeated: "Is a product put on the market (3) 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 (1) could not be analysed and reproduced (2, 4) without undue burden (5) by the skilled person before that date?" (emphasis and item numbering added).

2.2.1. (1): Analysis and reproduction of the composition instead of the product

22. The Enlarged Board's answer in G 1/92 unambiguously calls for the analysis and reproduction of the product as a condition to be examined. The referring Board directed the questions at the analysis and reproduction of the composition, but gave no explanation for this difference. This need not represent a significant shift on its own, but may just reflect the referring Board's position that G 1/92 was more likely to mean the reproduction of the composition. It may be a point of dispute whether G 1/92 excludes the whole product from the prior art or only the composition, as discussed in great detail in the present decision. However, there is little doubt that in the present context the skilled person's problem of reproducing the product is essentially equivalent to the problem of reproducing the composition. There is no pointer in either G 1/92 or the referring decision that the analysis and reproduction of the product would be hindered by

anything other than the lack of knowledge required to analyse and reproduce the composition. As mentioned above in point 17., this composition may also mean the internal structure. In the present case it was a point of dispute between the parties whether the polymer structure of ENGAGE® 8400 could be analysed and reproduced to a sufficient degree, cf. point III above.

2.2.2. (2): The joint condition “analysed AND reproduced”

23. The explanations and the analysis of the case law in the referring decision, and finally the referred questions, suggest that the first aspect is to be examined already under the presumption that the double condition of **analysability and reproducibility** of a commercially available product, as stated in G 1/92, is presumed to be a valid requirement, at least formally. The lack of legal basis in the Convention (and the preparatory works, the “Travaux”) does not seem to be the primary concern of the referring Board. It is another matter how the requirement is to be interpreted, for example to what degree the analysis and reproduction should be possible for the skilled person. These latter questions are addressed by the identified aspects as (ii) the degree of detail required for the analysis of said product and (iii) the requirements for its reproducibility.
24. For the purposes of Question 1, the Enlarged Board considers that a treatment of the analysability independent from the reproducibility is not required. No different conclusion can be drawn from the wording of Question 3, where the referring Board asks about the degree of detail required for the analysis (full vs. partial, cf. Reasons 11, aspect (ii)) and the

requirements for reproduction (identical or partial, cf. Reasons 11, aspect (iii)), where these two issues are not discussed independently from each other.

25. The Enlarged Board concludes that all three aspects identified by the referring Board turn, at least, on the requirement of reproducibility, i.e. whether this is indeed a valid condition of an available product for forming part of the state of the art. The statements of G 1/92, Reasons 1.4 also appear to identify reproduction (preparation) of the product as the ultimate goal of the skilled person, underlining that reproducibility is a decisive criterion.

2.2.3. (3): Product put on the market: man-made and naturally occurring

26. In the case underlying the referring decision the product in question was a commercially available man-made product. It is not discussed in the appeal file whether the ENGAGE® 8400 polymer had still been commercially available at a later time, e.g. at the time of filing or even later. For the referring decision these issues do not appear to play any role for the prior art status of ENGAGE® 8400.

27. The Enlarged Board does not dispute that the most plausible spontaneous interpretation of a "product put on the market" is that the product is man-made. There is no suggestion in the reasons of G 1/92 that its findings would not apply to naturally occurring materials in the same manner as for man-made products. The referred questions are also applicable to naturally occurring materials, not only to man-made products.

28. The fact that the product is not freely available to all, but sold by a company, would also not appear to establish any legally relevant difference. In fact, obtaining naturally occurring materials would involve costs in most cases. Naturally occurring raw materials are typically also not freely accessible to anybody in an economic sense. As is the case with man-made products, practical access to them is also controlled by economic actors.
29. Naturally occurring materials, including simple and standard chemical compositions are also effectively products put on the market. It is well known that companies producing various chemical products very often do not produce starting materials themselves, but buy them from specialty providers. Thus a "product put on the market" need not imply a particularly sophisticated chemical composition. Even pure chemical elements would normally appear on the market as a "product put on the market", and some of them essentially in the same form as they occur in nature. So the provider of a "product put on the market" need not inevitably rely on further chemical processing, transforming a chemical compound into another one with a chemical composition which is different from the composition of the starting material(s).
30. Thus, it can be concluded that the prior art status of non-reproducible man-made products put on the market and non-reproducible naturally occurring materials can be assessed similarly. Accordingly, the term "product put on the market" covers both man-made and naturally occurring products.

2.2.4. (4): The meaning of “reproduce”

2.2.4.1. Reproduction must be a physical reproduction

31. The Enlarged Board considers it to be undisputed that the ability to physically reproduce a physically existing product is meant where G 1/92 mentions the reproduction. This is quite clear where G 1/92 expects the skilled person to be able to prepare the product (Reasons 1.4). When it comes to a physical reproduction of a product, the skilled person must be able to obtain a tangible copy of the product, which it would consider as physically and technically equivalent to the original product that was sought to be reproduced, in view of the knowledge of the skilled person at the time when the reproduction of the product is sought. At this point, it may be left open whether hidden properties of the product, be it for lack of analytical tools or simply lack of interest on the part of the skilled person to fully discover all potentially analysable properties of the product, would or would not make the reproduced product different from the original product that the skilled person is seeking to reproduce.

2.2.4.2. Ways of physical reproduction: taking the product in its readily available form or preparing it from a different starting material

32. Defining physical reproduction in this sense, the term “reproduce” appears to cover two possibilities. Given that the product has been put on the market, and assuming that it has been available for a reasonable period of time and in reasonable quantities, it will normally open up for the skilled person the possibility to obtain the product again in its readily available form. The skilled person could in this manner obtain a physical copy of the product, being normally

technically equivalent to previously sold copies of the product. If the skilled person could analyse and thereby determine the composition of the product, then taking the product also enables the skilled person to obtain the composition at least in the form in which it appears in the product, if the skilled person were specifically seeking to physically reproduce the composition. Indeed, this is arguably the simplest way for the skilled person to obtain physical copies of the product in question, where they need the product for a technical purpose, whether for use in its readily available form or for transformation into another product.

33. Alternatively, the skilled person could choose a different route. Depending on the product, the purpose of the reproduction and their technical capabilities, the skilled person would consider manufacturing the product themselves. In this case the skilled person would look for a suitable method of manufacture, which implies that the skilled person starts from a starting material which is somehow different from the form in which the product has been put on the market.
34. A third possibility of physical reproduction for the purposes of G 1/92 is not apparent. It is understood that in practice both options will only be examined as a theoretical exercise in some proceedings where the state of the art needs to be determined, although it is not excluded that parties may also bring physical evidence to support some issue in the generally written and oral proceedings.
35. The reproducibility requirement of G 1/92 seems to be derived from the assumption that the skilled person

would inevitably look for a technical teaching which would enable it to prepare the product. Thus, the taking of the product in its readily available form again may not bring the skilled person forward if they seek to prepare the product themselves, as a possible and indeed reasonable and plausible technical purpose for the skilled person. However, a technical teaching derivable from the prior art is not restricted to information about a manufacture or use of a product, even if it may also be an "essential purpose" of a technical teaching, as stated by G 1/92, Reasons 1.4, first sentence. The formulation used there "an essential purpose of any technical teaching" (underlining added) seems to suggest that any technical teaching that cannot serve the direct purpose of the manufacture or use of the product from which such a teaching had been derived, is not a technical teaching at all. However, restricting technical teachings of the prior art in this manner would appear as manifestly unreasonable. Technical teachings derived from a product may also be useful for the skilled person for a use that is unrelated to the originally foreseen uses of the product.

36. G 1/92 also does not require that a technical teaching "resulting from the product put on the market" must be exclusively directed at the manufacture of the product itself, and as such inevitably serve the "reproduction" of the product. Apparently, a technical teaching concerning the use of the product is also a technical teaching and would fall under the "essential purpose" of the teaching derivable from the product. The wording used by G 1/92 in the previous point (Reasons 1.3) suggests that the technical teaching concerning the use of the product is derivable from its public use.

However, there is no reason to read "use" here in a very narrow sense. Where a product is put on the market with the clear purpose of being processed into various other products, as is the case with the ENGAGE® 8400 polymer, the technical teaching concerning the "use" must necessarily cover steps in manufacture, possibly not of the product in question, but of some other product. This in turn requires the skilled person to look at all kinds of technical information that can be derived from the product in question, such as its composition and other physical properties, without inevitably having in mind the preparation of the product in question itself.

2.2.4.3. G 1/92 and the referring decision is read as addressing reproduction by a different route

37. It appears that throughout the case law, when the reproducibility requirement for any given product is analysed in order to interpret G 1/92, reproduction is understood only in the second sense (cf. point 33 above), i.e. the preparing of the product by a method that is different from taking it in its readily available form. The statements made in G 1/92 and the questions of the referring decision only appear to make sense with this understanding of reproducibility. Both G 1/92 and the referring decision proceed on the condition that the product has been put on the market, and that as such is physically available. Assuming the simple taking of the product "as is" for the purposes of a reproduction would obviously make certain statements in G 1/92 and the referred questions redundant. The statement in G 1/92 that "*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" (Reasons 1.4, second sentence, discussed also above) is particularly difficult to read in any other way than implicitly excluding the buying of the product as a way of "preparing it".

38. Thus, it can be concluded that the term "reproduced" as used in the referring decision is to be read as a "reproduction by a different route", i.e. not by taking the product in that specific form as put on the market and in which it is readily available. The parties also agreed that this is the correct interpretation of the questions of the referral. In order to avoid any misunderstanding, this reproduction "by a different route" only delimits this way of reproduction from the repeated taking of the product from the market. It does not imply that the skilled person's prospective method of manufacturing the product must be inevitably different from that of the seller of the product. This latter method would anyway not be in the public domain if the product were considered not to be reproducible by a different route.

2.2.4.4. Reproduction must be based on the knowledge of the skilled person

39. Finally, it is important to observe that when G 1/92 requires reproducibility of the product put on the market, it is clearly only on the basis of the common general knowledge the skilled person has before the filing date. The usual additional information in a patent application to help out the skilled person for the purposes of Article 83 EPC does not help here. It is not a specific invention disclosed in a patent application that needs to be reproduced, but the

(potential) state of the art, which is not assessed together with an application, but without it. Any additional teaching in a patent is not information that would itself fall under the state of the art under 54(2) EPC and as such cannot flow into the determination of the teaching of the state of the art. As such, it also cannot help the skilled person to complement anything that may be missing from either the common general knowledge or the state of the art when the skilled person is confronted with some non-enabling teaching in the state of the art.

2.2.5. (5): Without undue burden

40. It may appear that there is some divergence in the case law depending on the interpretation of the term "without undue burden" (see in particular T 0952/92). Its scope may play a role if Question 3 were to be answered by the Enlarged Board. Also, amicus curiae submissions invite the Enlarged Board to shed light on the boundaries of this condition. The referring decision itself apparently included this condition in the referred questions because it was mentioned in G 1/92 (see the crucial point in Reasons 1.4), though this condition was not elaborated on any further in G 1/92 either, and was not even mentioned in the final answer. This condition need not be analysed and interpreted further than it is derivable from G 1/92. For the purposes of the referral it is sufficient to assume that analysis and reproduction does not involve an undue burden where it can be made on the basis of the skilled person's common general knowledge.

2.3. Questions 2 and 3

41. As to question 2, it is not provided with any particular explanation in the referring decision. Point 22 of the reasons makes it clear that the additional question about the status of technical information taken from documentary evidence concerning a non-reproducible product is seen by the referring Board as possibly being related to the prior art status of such products. The question is conditional on the answer to question 1, in the sense that it only needs to be answered if the Enlarged Board were to find that non-reproducible products as such do form part of the state of the art. Otherwise it is not apparent that answering it would require different considerations from those required for answering Question 1.
42. Question 3 would only be relevant if the Enlarged Board were to find that the enablement requirement is indeed a valid requirement. At this stage it requires no further attention.

2.4. The implications of the reproducibility requirement

43. The referring decision considers that at least two different interpretations of G 1/92 are possible (Reasons 11(i), 12): Where the composition (and therefore the product) cannot be reproduced, (1) the product itself (inevitably including its composition) is not part of the state of the art in its entirety for the purposes of Article 54(2) EPC, or (2) only the composition of the product does not belong to the state of the art, but the product itself and its reproducible properties are part of the state of the art. Several decisions are cited to support both interpretations. As

will be shown, deciding this point alone is sufficient to answer all questions of the referral, and also appears sufficient for the referring Board to decide the case before it.

2.4.1. First interpretation: the product put on the market is not prior art in its entirety

44. The feasibility of the first interpretation will be examined first. According to this interpretation the product as such, i.e. in its totality, is not part of the state of art. This boils down to the assumption that the non-reproducible product is completely disregarded, because the notional skilled person is formally not aware of its existence. The non-reproducible product simply does not exist for the skilled person.

2.4.1.1. The reproducibility requirement establishes a legal fiction

45. Before analysing the question any further within the legal framework of the EPC, it may be immediately apparent that such an assumption directly contradicts everyday experience and obviously cannot hold for any skilled person. It is instructive to take the ENGAGE® 8400 polymer as an example: This product was intentionally put on the market as a multi-purpose polymer, useful in various applications. The manufacturer made efforts to advertise it and to make it known for all potential customers, as plainly demonstrated by the documents in the file, e.g. D5a and D5. The customers would be expected to buy the product with the obvious intention of using it for some technical purpose - at least in the form as delivered by the manufacturer. Without doubt, such customers of

the manufacturer would be skilled persons in their own field.

46. It is another matter that the manufacturer at the same time may have made every effort to hide the production secrets from its competitors, including the manufacturing steps and the exact composition of the material. However, a distinction is to be made between those technical teachings that may be derived from the physical product itself, and the technical teaching that is required for manufacturing the product.
47. Such a distinction between various teachings in the state of the art is nothing unusual in the patent law under the EPC. When applying the problem-solution approach, it may well be a plausible argument that the skilled person faced with the objective technical problem of manufacturing a product with similar properties cannot be assumed to depart from the product ENGAGE® 8400 because its method of manufacture is not in the public domain. It can be argued that a skilled person would turn to some other starting point, purely as a question of identifying the theoretical "closest prior art", cf. CLBA I.D.3 with sub-points, in particular I.D.3.5.1-3. For making this assumption, there is no need to go as far as to state that the polymer does not exist at all. It is sufficient to establish that its method of manufacturing is not known.
48. But even this somewhat artificial assumption of the problem-solution approach will not be reflected in any real-life situation. On the contrary, also the competitors of the manufacturer of ENGAGE® 8400 will

take a close look at the polymer and will try to analyse it from all possible aspects. Any proposition that the product as such does not exist for the skilled person, in the sense of any skilled person - and therefore it is also irrelevant for any technical solution -, is clearly far-fetched and utterly implausible, manifestly contradicting notorious facts. So, the legally not existing but otherwise commercially available product that is even deliberately brought to the attention of skilled persons can only be regarded as a legal fiction. Legal fictions that override facts do exist in law, including patent law, but they should normally be explicitly stated in the law. These considerations alone dictate that the fiction of the exclusion of the product from the state of the art should be treated with serious reservations.

2.4.2. The skilled person needs readily available materials, even if non-reproducible

49. As already set out (see point 33. above), reproducibility in the sense of the referred questions means reproduction by a different route, meaning that the skilled person will have to try to reproduce the product from suitable starting materials. As a simple illustrative example, the technical teaching that needs to be reproduced could be the composition and the corresponding manufacture of a relatively simple chemical compound, where the manufacture can be expected to require only a few and simple process steps.
50. It appears undisputed that the skilled person should not require more than common general knowledge to reproduce the technical teaching in question. This also

follows from the premise assumed by T 206/83, namely that the threshold of the reproducible disclosure by the state of the art is that of Article 83 EPC, the (knowledge of the) skilled person.

51. It appears also undisputed that the common general knowledge can only be based on the state of the art. Both are understood as technical information available to the public. The state of the art is seen through the eyes of the skilled person. The knowledge against which the contribution of an invention is measured is the technical teaching that the skilled person would take from the state of the art. The skilled person has no source other than the state of the art from which to draw its common general knowledge. Therefore, a teaching that does not belong to the state of the art also cannot belong to the skilled person's common general knowledge. It is also settled case law that the common general knowledge is part of the state of the art, cf. CLBA Chapter I.C.2.8.
52. As a side note, the publicly available character of the common general knowledge is not derived from the term "common". The term "common general knowledge" is not interpreted in the sense of "general knowledge belonging to everybody, being in common possession". Rather, it means "the basic or general knowledge known by every skilled person in the relevant field", in the sense of knowledge that is neither highly specialised nor represents cutting edge technology, see CLBA Chapter I.C.2.8.2 and I.C.2.8.3. This corresponds to the accepted German and French versions of the term: allgemeines Fachwissen, connaissances general de base.

53. It is also taken to be beyond dispute that the "common general knowledge" is by definition the knowledge of a larger group of skilled persons in any given field. The typical source of the knowledge is textbooks, handbooks, reference books, university course materials, all sources that are eminent examples of publicly available documents. Where no written sources are found, the knowledge of the skilled person is derived from the fact that some specific technical teaching is considered to be known by a large community of skilled persons working in a given field, it being understood that the particular technical information is considered by all of them to be so well known that its public availability - in the sense of not being confidential and known only to a restricted group - is beyond any doubt.
54. It may be discussed why and to what extent the state of the art can be broader than common general knowledge, as found in the case law (among others by T 206/83, cf. Reasons 4 to 6), but this is not relevant in the present context. What matters is that common general knowledge cannot cover more than the state of the art.
55. The first interpretation (cf. point 44 above) postulates that non-reproducible but otherwise existing and commercially available products do not belong to the state of the art. Indeed, this is so stated by several decisions (e.g. T 1833/14, T 0023/11, as more recent decisions). This line is also argued by the patent proprietor.

56. The Enlarged Board considers that the first interpretation leads to an absurd result and therefore cannot hold. This is explained below.
57. Assuming, for the sake of argument, that the first interpretation is correct, it follows directly from it that non-reproducible products, being excluded from the prior art, cannot belong to the common general knowledge either. On the other hand, the skilled person, when attempting to reproduce a written or other type of disclosure in the sense of a true physical reproduction of the given technical teaching, be it a product or a process, can only rely on common general knowledge. This means that the skilled person can only use starting materials that are themselves part of the state of the art - this follows from the premise that common general knowledge cannot go beyond the state of the art. If non-reproducible products do not exist for the skilled person, they cannot be used as starting material.
58. From this it would follow that only starting materials that are reproducible in some way other than by merely obtaining them from the market or from nature can be considered by the skilled person. In practice, the skilled person may perhaps resort to any available "starting material", i.e. also any commercially available or naturally occurring material, but only on the condition that they are confident that in theory, they would be able to reproduce their starting materials.
59. In order to illustrate the process, in the next round the skilled person will have to rely on some "precursor materials" in order to reproduce their "starting

material" (a different term is used here merely to better distinguish from the previous "starting materials"). With the same logic, the precursor materials leading to the starting materials in the above example also have to be reproducible. But again, according to the starting premise, non-reproducible but merely "available" materials are excluded. They cannot support reproducibility, themselves not being reproducible.

60. However, there are no products on earth that are in the end not based on materials that themselves cannot be reproduced. In the end, every material requires some starting material that is not reproducible but simply available. For example, the simplest compounds are made up of a few chemical elements, and chemical elements cannot be reproduced, in the sense of being built up of (or reduced from) other (again in themselves "reproducible") materials. Constructing atoms freely is beyond the reach of the current state of technology, hence of the skilled person.
61. Setting aside the question of whether taking elements directly from nature would be an economically feasible option for a real-world skilled person, it may perhaps be assumed that the notional skilled person would readily find chemical elements in nature, so they need not obtain them from a market participant. But this does not change the non-reproducible character of such materials in the sense of the starting premise. The patent proprietor's reference to crude oil is a particularly good example - crude oil is the basis for many standard products, but naturally occurring crude oil (with all the components of crude oil) is not at all trivial to reproduce, if possible at all. At the

same time, it is also common wisdom at the time of writing that the earth's oil resources are finite and will not last forever.

62. The patent proprietor argued that naturally occurring materials, such as standard small molecule compounds that are taken from a natural source are obviously reproducible for the skilled person. The argument seems to be that the skilled person can make very simple molecules or elements, and from those they can build practically anything. It is not seen as a problem that these elements or molecules are essentially taken from nature. But such arguments do not explain how such standard chemical elements, whether pure elements or just small molecule compounds, would be reproducible for the skilled person without having to resort to naturally occurring materials as starting materials. The fact that several manufacturers may be able to produce indistinguishable products also does not change the fact that any process must inevitably have recourse to some starting material which is then used directly in the form in which it is readily available to the skilled person.
63. Either way, it remains that the requirement of reproducibility of the state of the art, the reproducibility excluding the mere obtaining of the product from the market or taking it from nature, leads to the result that no material in the physical world would belong to the state of the art.
64. It is noted that for the purposes of this example it had been assumed that the skilled person is familiar with the complete vertical production chain. In practice, a chemist as a skilled person would have to turn to readily available products much sooner, already

before arriving at the lowest level of the raw materials.

65. From there on it is only a small step to realise that the first interpretation must inevitably lead to the exclusion of all written and oral disclosures as well as from the state of the art, i.e. not only those teachings that are directed at the synthesis of some simple or complicated compound. No technical teaching would be reproducible, irrespective of the field of technology, for lack of any "legally" available materials for any attempt to physically realise the written or oral technical teaching. So, the enablement requirement, which excludes physically available but "non-reproducible" products, conveniently removes practically everything from the state of the art. The state of the art remains as an empty set, mathematically speaking.

66. Conversely, if it were to be assumed that a skilled person would rely on standard starting materials available as a product put on the market - following the natural and in fact only technically feasible approach - then the exclusion from the state of the art of the original and presumably non-reproducible product could no longer be justified either.

67. From the above it follows that the first interpretation put forward by the referring Board (see point 43 above) is not tenable. The assumption that the skilled person would ignore non-reproducible products cannot hold. Rather, the opposite is true: the skilled person cannot achieve anything without non-reproducible, but otherwise available products. Relying on readily available products is not just a question of convenience, contrary to the patent proprietor's

argument. Rather, the skilled person cannot exist without them, as a question of technical reality. Readily available products cannot be excluded from the common general knowledge of the skilled person, hence also not from the state of the art within the meaning of Article 54(2) EPC.

68. During the proceedings the patent proprietor itself made the natural assumption that a skilled person would turn to various suppliers of chemical compounds as a matter of course, apparently overlooking that also the "small molecules chemicals" referred to are also "products put on the market". These are just as non-reproducible as the ENGAGE® 8400 polymer, and they can only be obtained from some natural source. Such a natural source may appear to be a more reliable source than the manufacturer of ENGAGE® 8400, but it is difficult to establish a legally relevant difference between them in terms of their prior art status.

2.4.3. The second interpretation: only the composition is excluded from the prior art

69. According to the referring decision, in the case law this is the other interpretation of the enablement requirement, cf. Reasons 11(i) and point 14. above. When following this interpretation it can be difficult to state that a certain property of a physically and legally existing object as such does not exist. The problems associated with the enablement requirement are not caused by only theoretical properties that a product put on the market may or may not have, and which cannot be determined for lack of analytical capabilities. The problem is the property which is known to exist and whose parameters are also known, because they could be analysed. There are properties

that are known to exist without analysis, e.g. the standard physical properties of any material, even if their exact value may never have been published. Similarly, every material has a chemical composition which is known to exist even if it has not been analysed and thus has not been determined. Assuming that a product put on the market has no composition at all, especially in view of the fact that it could actually be determined, is obviously an absurd proposition. For the second interpretation, the natural understanding of the non-existent prior art composition is that the skilled person knows the composition but disregards it, ostensibly because it is unable to reproduce it. This assumption may not immediately seem as absurd or simply implausible. The skilled person may still retain certain properties of a marketed product in an attempt to reproduce the product. E.g. it may decide to make a copy of a mechanical device made from a proprietary material - such as the ENGAGE® 8400 polymer - but instead of using the proprietary material, the skilled person would envisage using a common and generally known standard material instead, while retaining the mechanical structures.

70. However, even with this approach, the skilled person will not be able to avoid eventually turning to a non-reproducible but available product. As explained for the first interpretation, the skilled person will at some point have to turn to a material that they cannot reproduce by a different route, which means that the skilled person will also have to deal with the non-reproducible composition. After all, all the starting materials used by the skilled person must be selected on the basis of their desired properties, which in turn are determined by the composition of the material. Also

the very first raw material in the production chain inevitably has to come from a natural source. Its composition must be known and consciously exploited by the skilled person, even where they would not be able to reproduce the composition by a different route. The non-reproducible property, the composition, cannot be ignored or disregarded, or else there will be no material left for the skilled person to work with. It follows that the second interpretation of G 1/92 must also be rejected.

71. This finding also seems to correspond to the behaviour of the skilled person in the real world. It is only natural for the skilled person to look for solutions on the market when a specific solution, e.g. a material with certain properties is required but their own knowledge or resources are not sufficient to prepare such a material. Arguably, this is the first step that the skilled person would take, before they make an attempt to prepare the material themselves, as it promises a faster access to the desired material. Not only the market but also nature remains such a source.
72. Accordingly, neither the first nor the second suggested interpretation of the referring Board can be brought into conformity with the Convention, given that they both lead to a manifestly absurd result.

2.5. Correct interpretation of the answer of G 1/92

73. The contradictions of an enablement requirement set up by G 1/92 disappear if the condition of reproducibility in the answer of G 1/92 can be interpreted as including the obtaining of the product from the market in its

readily available form. Put differently, the expected reproducibility of the product must be understood in a broader sense, namely as the ability of the skilled person to obtain and possess the physical product. This would mean that the requirement would be inherently fulfilled by a product put on the market, as suggested by the EPO President. This, in turn, must lead to the conclusion that the condition is in fact redundant. The proper reading of the answer of G 1/92 is as follows:

The chemical composition of a product is part of the state of the art when the product as such is available to the public and can be analysed by the skilled person, irrespective of whether or not particular reasons can be identified for analysing the composition.

74. Thus, the result is that the answer of the opinion G 1/92 cannot be maintained in its entirety. It also follows from the correct interpretation of G 1/92 that all analysable properties of the product put on the market will belong to the state of the art, i.e. they will represent technical information that the skilled person is aware of and will consider relying on when looking at technical solutions.
75. These considerations also provide a straightforward answer to the prominently argued question of the later patenting of the product that has already been put on the market and cannot be reproduced by a different route. If such a product forms part of the state of the art, this must lead to the result that a later product cannot be found novel, if all the claimed features were disclosed by the earlier available product.

2.5.1. Analysis without undue burden

76. Given that no reproducibility is required, the issue of the "undue burden" of the reproducibility need not be addressed either. The only question that may remain is whether there are legal limits to the analysis of the product put on the market, i.e. whether the condition "analysis without undue burden" is to be examined by the Enlarged Board.
77. This question may apply both to a real analysis and to a hypothetical analysis, i.e. an analysis which has actually been carried out, e.g. experimental results submitted as factual evidence in any proceedings, or which could theoretically have been carried out and which have or could have provided relevant properties of the product. The question is whether only those properties of the product become part of the state of the art which could be determined without unreasonable, i.e. undue effort, e.g. using standard analysis methods from the toolbox of the skilled person, or whether also those properties become part of the state of the art which could only be determined by a technically and/or financially excessive, but still technically possible, analysis.
78. The Enlarged Board need not determine at which point the efforts of the skilled person to analyse the marketed product would reach the threshold of the "undue burden", or whether this is a valid condition at all. The referred questions can be decided also without addressing this issue, given that they were predicated on the joint condition of analysability and reproducibility (cf. points 23. to 25. above). It is also not apparent that the question would be decisive for the decision of the referring Board, because it is

not apparent that those properties of ENGAGE® 8400 that the board wished to take into account may have been obtained only with an analysis that needed efforts beyond an undue burden (cf. Reasons 3.3 of the referring decision).

79. For this reason, the requirement of the "undue burden" is omitted from the answers given by the Enlarged Board. This does not mean that the issue of the "analysis without undue burden" can never arise.

2.5.2. Answer to Question 1.

80. The Enlarged Board can answer the questions of the referral also without a detailed analysis of whether there is any legal basis for the enablement requirement of G 1/92 or whether this may be derived from equitable considerations. Reproducibility in the sense of the referred questions cannot be a precondition for the product to become part of the state of the art within the meaning of Article 54(2) EPC. Question 1 is to be answered in the negative: A product put on the market cannot be excluded from the state of the art for the sole reason that its composition or internal structure could not be analysed and reproduced by the skilled person. In this context, the term "reproduce" does not encompass the obtaining of the product in that form as put on the market, but only means reproduction in the more limited sense, according to the interpretation of the referred questions, cf. point 38. above.
81. It is to be emphasised that the Enlarged Board sees no reason to question the other legal issue addressed by G 1/92, that the skilled person needs no particular reason for analysis.

2.6. Consequences of the state of the art status of the product put on the market

2.6.1. Potential disappearance of the non-reproducible product

82. The patent proprietor argued at length that man-made non-reproducible products cannot be considered to be "available to the public" because they may disappear from the market or may change. The Enlarged Board does not see why this undisputed fact would keep the product from becoming part of the state of the art. Taking into account the uncertain future availability of a product put on the market, e.g. a man-made product, would mean that a fundamentally new element would appear in the notion of the "state of the art" within the meaning of Article 54(2) EPC. The prior art status of a disclosure will have to be decided not only on the basis of facts that all occurred before the filing date (and as dictated by the wording of Article 54(2) EPC), but would have to include an element of prediction. Put differently, the term "made available to the public" would have to imply not only the access to the information possibly only once in the past, but an apparently long-term, if not permanent and everlasting availability of the source of the information, here the man-made or naturally occurring product.
83. The disappearance of the non-reproducible product may cause problems, but such problems are nothing new or unusual. The problem how to reconstruct the properties of the product for the purposes of establishing what has been disclosed by it should not be confounded with the problem of the notional skilled person trying to reproduce the product exactly or partially, in order for the product to be part of the state of the art. That latter problem appears in the referring decision

and in the cited case law as the problem of the skilled person, which is to be solved as a technical problem, and in turn, the legal status of the product as belonging to the state of the art depends on the outcome, i.e. whether the technical problem of reproduction - in many cases merely a hypothetical and purely mental exercise - could achieve a certain technical level or not.

84. This approach is wrong, as explained above. The problem of reconstructing the properties of the product remains, but it is a practical legal problem of proof for the lawyer. For an attorney there are no limits to the efforts it wishes to invest in the matter, there is no "undue burden". As the case law correctly reflects, this is a problem of proof and evidence, in that it may possibly be difficult to establish **what** exactly became part of the state of the art (and when and how), when the original facts disappear.
85. The "state of the art" is the information content, the abstract technical teaching, which does not disappear from the public domain as a question of legal principle once the technical teaching becomes part of the state of the art, i.e. enters the public domain. See e.g. T 1553/06, where an internet disclosure was available for a very short time only, but was still deemed as belonging to the state of the art, irrespective of the fact that it later disappeared. Previously existing but later disappearing prior art, in the sense of the disappearance of the original carrier of the technical information, is a regular occurrence in the proceedings under the EPC, as attested by the cases cited in CLBA 10th Edition, 2020, I.C.3.2.2. (Lectures and oral

disclosure), I.C.3.2.3. (Internet disclosures) and I.C.3.2.4. (Public prior use, with sub-points).

86. It is undisputed that the content of the technical teaching may be difficult to establish at a later time, as a question of proof. This is demonstrated by the significant body of the case law dealing with prior use. Effectively all those examples where the prior use had to be established by way of complicated evaluation of evidence correspond to the situation where a disclosure of some technical information was factually available to the public for a relatively short time only, but did not prevent the disclosure from becoming permanently part of the state of the art as a legal consequence of its temporary availability. Otherwise, if only prior uses that were still ongoing could be part of the state of the art, the problems of proof would not emerge or would certainly be much less problematic - in fact all cases could be easily settled by an inspection under Article 117(1) (f) EPC.
87. It is another matter that also technical considerations may play a role when the evidence is presented and evaluated. It remains that the success or failure to prove some property of the product, including its exact or only partial composition, has no influence on the legal character of the product as belonging to the state of the art as such (assuming the uncontested public availability of the product). It is again a different matter how the established, i.e. proven properties of the product may be taken into account, or precisely the insufficient evidence about hypothetical properties might lead to the finding that the product is not relevant as prior art.

88. The patent proprietor also pointed out that a product put on the market may be modified. This is certainly natural and can be expected, but it will only mean that not only the old version, but also the new version of the product will become a separate and independent disclosure within the state of the art. Again, problems of proof may arise, for example it may be difficult to separate which version was earlier and which was later, but this does not disqualify either the new or the old version of the product from being part of the state of the art.

2.6.2. Technical teaching resulting from products put on the market

89. The state of the art is to be compared with the invention. It is always a technical teaching that is compared to another technical teaching, namely the teaching represented by the invention for which the patent application has been filed. This comparison is an abstract and purely intellectual exercise, even if the teaching of the marketed product is derived from a physical analysis of the physically available product. So even if a product disappears from the market, the abstract teaching that had been derivable from it remains part of the state of the art, simply by virtue of the fact that it had been accessible to the skilled person at some point in time and the skilled person could make a record of any abstract teaching that had been derivable from the product.

90. This is stated explicitly by G 1/92 itself: "*It is the fact that direct and unambiguous access to some particular information is possible, which makes the latter available, whether or not there is any reason for looking for it*" (Reasons 2, last sentence). The

Enlarged Board sees no reason to disagree with this finding, and it is also not affected by the clarification of the answer of G 1/92 as explained in point 73 above. Similar to a publication in a library that has never ever been taken out from the library, it is irrelevant that a certain analysable property of the product may never have been analysed or reported in a public document.

91. All analysable properties of the product put on the market became public alone by the possibility that they could have been analysed, because the product was physically accessible. If the composition could be analysed, this became part of the state of the art as well, also if the skilled person would not have been in the position to reproduce it on their own.
92. The fact that the skilled person would possibly recognise that they are unable to reproduce some important property of the product may also represent relevant technical information. This can be taken into account when it is to be assessed whether the skilled person would consider the product as a relevant prior art in view of a technical problem they are seeking to solve. This corresponds also to the standard expectations on the skilled person, who would normally consider various aspects, and not necessarily only technical aspects, when having to decide whether a product available from the market would be suitable for their needs. Depending on the circumstances, the skilled person may also take into account the potential disappearance of the product or the fact that they may become dependent on a single supplier. However, this is not so much a technical but rather a commercial or economic consideration. Economic factors, if relevant

to the skilled person, can at most be considered as secondary indicia in determining inventive step and cannot replace technical considerations, see CLBA 10th edition 2022, I.D.10.1.

93. Prior art that is not considered relevant does not mean that the prior art does not exist. Something that belongs to the existing state of the art need not be relevant for any invention and for all provisions of the EPC where the state of the art is to be taken into account. That a non-reproducible product belongs to the state of the art does not necessarily mean that the product or its features must be taken into account equally when assessing novelty or inventive step.
94. For novelty, the comparison of the invention with the state of the art does not require some particular motivation from the skilled person. The examination for novelty is made with the eyes of the skilled person, but the examined state of the art is not consciously chosen by the skilled person. Rather, it is chosen by the body (examiner, judge) after a search that was conducted in the knowledge of the invention. The skilled person may not have considered an unrelated and remote prior art in view of the technical problem they seek to solve, but it still cannot be ignored for novelty, as demonstrated by the notion of the accidental anticipation, see G 2/03, Headword 2.1 and Reasons 2.2 with sub-points.
95. This is different for inventive step, where the skilled person may have good reasons for disregarding some prior art, for example because of insufficient information attached to it. The technical teaching relevant to the skilled person must always be

determined in the light of the circumstances of each case. Depending on the circumstances, also a non-reproducible product may be considered to represent the closest prior art or just a source of a complementary technical teaching, suitable for combination with the closest prior art. The findings of the Enlarged Board of Appeal in G 2/88 and G 6/88 in this regard remain valid: "... *whatever the physical means by which information is made available to the public (e.g. written description, oral description, use, pictorial description on a film or in a photograph etc., or a combination of such means), the question of what has been made available to the public is one of fact in each case [...] 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"* (Reasons 10 and 8, respectively).

96. It follows from the above that disclosed but non-reproducible features of a product may, but need not, flow into the assessment of inventive step. Adding some lemon juice to a glass of Coca-Cola for a less sweet taste may not be inventive simply because the recipe for Coca-Cola is secret and therefore the original taste of Coca-Cola is considered as unattainable. On the other hand, achieving the original taste of Coca-Cola without sugar or caffeine is probably an unsolved

problem at the time of writing. There are no formal and strict rules as to how a non-reproducible but publicly available product or any of its properties can be taken into account when inventive step is examined. The relevant technical teaching that a skilled person would take from such a product is always case specific - it depends on both the product in question and the invention under examination.

2.7. **Answers to Questions 2 and 3**

97. The argument that any technical information about the non-reproducible product is also to be excluded from the state of the art appears to be predicated on the assumption that the product itself is not part of the state of the art. The exclusion from the state of the art of the technical information relating to a non-existent product would indeed appear to be the logical consequence of the non-existent product, even where such non-existence is merely fictional. But neither the referring decision nor the arguments of the parties appear to explain anywhere why such technical information would not form part of the state of the art if the product itself does, irrespective of its reproducibility.
98. It is also not the task of the Enlarged Board to seek for such an argument. Rather, given that also non-reproducible products are to be included in the state of the art, relevant technical information on such products must obviously also belong to the state of the art. If the product is available for analysis, the results of such an analysis do not even pose the question of reproducibility, at least as long as the methodology of the analysis itself also belongs to the

common general knowledge of the skilled person or is at least sufficiently disclosed in the state of the art.

Question 2 is to be answered in the affirmative:

Publicly available technical information about such a product forms part of state of the art, irrespective of whether the skilled person could analyse and reproduce the product and its composition or internal structure.

99. Similar to Question 1, here the term "reproduce" is to be read in a restricted sense, as set out above in point 80.
100. In view of the answers to Questions 1 and 2, Question 3 is moot.

3. Order

The questions referred to the Enlarged Board of Appeal are answered as follows:

1. A product put on the market before the date of filing of a European patent application cannot 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 by the skilled person before that date.
2. Technical information about such a product which was made available to the public before the filing date forms part of the state of the art within the meaning of Article 54(2) EPC, irrespective of whether the skilled person could analyse and reproduce the product and its composition or internal structure before that date.
3. In view of the answers to Questions 1 and 2 an answer is not required.

The Registrar:

The Chairman:



N. Michaleczek

C. Josefsson