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Datasheet for the decision of 28 July 2023

Case Number: T 0116/18 - 3.3.02

12002626.5 Application Number:

Publication Number: 2484209

A01N43/56, A01N51/00 IPC:

Language of the proceedings: ΕN

Title of invention:

Insecticide compositions

Patent Proprietor:

Sumitomo Chemical Company, Limited

Opponent:

SYNGENTA LIMITED

Relevant legal provisions:

EPC Art. 56 RPBA 2020 Art. 13(2)

Keyword:

Interpretation of G 2/21 Inventive step - (yes) Amendment after summons - exceptional circumstances (no)

Decisions cited:

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G 0002/21, G 0001/19, G 0002/10, G 0002/07, G 0003/98, R 0017/09, T 0873/21, T 1442/18, T 0031/18, T 0184/16, T 1677/11, T 1642/07, T 0536/07, T 0939/92
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Decisions of national courts cited:

Germany:

- Bundesgerichtshof X ZB 15/67 (Rote Taube)

United Kingdom:

- Generics (UK) (trading as Mylan) vs. Warner-Lambert Company Ltd. [2018] UKSC 56
- Sandoz vs. BMS [2023] EWCA Civ 472

The Netherlands:

- Gerechtshof Den Haag - 200.327.532/01 and 200.328.173/01 - BMS - Sandoz e.a.

Catchword:

- Binding effect of a referring decision (see Reasons, points 9 to 9.4.5)
- Interpretation of order no. 2 of G 2/21 (see Reasons, points 10 to 11.14, in particular points 11.10 and 11.14)
- Submissions based on earlier decisions of the boards of appeal admittance into the appeal proceedings (see Reasons, points 32 to 32.4, in particular point 32.3)



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Case Number: T 0116/18 - 3.3.02

DECISION
of Technical Board of Appeal 3.3.02
of 28 July 2023

Appellant: SYNGENTA LIMITED

(Opponent) Syngenta Jealott's Hill

International Research Centre

Bracknell

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Respondent: Sumitomo Chemical Company, Limited

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Representative: Winter, Brandl - Partnerschaft mbB

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 18 December 2017 rejecting the opposition filed against European patent No. 2484209 pursuant to Article

101(2) EPC.

Composition of the Board:

Chairman M. O. Müller
Members: A. Lenzen
R. Romandini

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Summary of Facts and Submissions

I. This decision concerns the appeal filed by the opponent (appellant) against the opposition division's decision (decision under appeal) to reject the opposition against European patent No. 2 484 209 (patent).

The patent originates from European patent application No. 12002626.5 (application or divisional application, depending on the context), which is a divisional application of European patent application No. 05719327.8 (parent application).

- II. Reference is made in the present decision to the following documents:
 - D4 WO 03/015519 A1
 - D8 WO 2005/048711 A1
 - D9 Experimental report field trials (18 pages, filed with the notice of opposition)
 - D10 Experimental report (2 pages, filed with the notice of opposition)
 - D21 Additional Test Data (6 pages, filed by the patent proprietor (respondent) with its letter dated 26 October 2016)
 - D22 Additional Test Data (21 pages, filed with the respondent's letter dated 11 September 2017)
 - D23 Experimental report (8 pages, filed with the statement of grounds of appeal)
- III. The first oral proceedings in the present case were held as a videoconference on 22 July 2021 in the presence of both parties.

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IV. The board issued a written interlocutory decision dated 11 October 2021 (referring decision) referring the following questions to the Enlarged Board of Appeal (referring decision, order):

"If for acknowledgement of inventive step the patent proprietor relies on a technical effect and has submitted evidence, such as experimental data, to prove such an effect, this evidence not having been public before the filing date of the patent in suit and having been filed after that date (post-published evidence):

- 1. Should an exception to the principle of free evaluation of evidence (see e.g. G 3/97, Reasons 5, and G 1/12, Reasons 31) be accepted in that post-published evidence must be disregarded on the ground that the proof of the effect rests exclusively on the post-published evidence?
- 2. If the answer is yes (the post-published evidence must be disregarded if the proof of the effect rests exclusively on this evidence), can the post-published evidence be taken into consideration if, based on the information in the patent application in suit or the common general knowledge, the skilled person at the filing date of the patent application in suit would have considered the effect plausible (ab initio plausibility)?
- 3. If the answer to the first question is yes (the post-published evidence must be disregarded if the proof of the effect rests exclusively on this evidence), can the post-published evidence be taken into consideration if, based on the information in

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the patent application in suit or the common general knowledge, the skilled person at the filing date of the patent application in suit would have seen no reason to consider the effect implausible (ab initio implausibility)?"

- V. The referring decision led to decision G 2/21 by the Enlarged Board. The answers to the referred questions are given in the order of G 2/21 and are quoted below in the reasons for the decision.
- VI. After G 2/21 was issued, the following documents were filed by the appellant (D25 and D27) and the respondent (D26):
 - D25 "Experimental evaluation of synergy of CTPR and THMX against *Chilo suppressalis*" (4 pages)
 - D26 Nauen, R. et al., "Thiamethoxam is a neonicotinoid precursor converted to clothianidin in insects and plants", Pesticide Biochemistry and Physiology 2003, 76, pages 55 to 69
 - D27 Sandoz & Teva vs. Bristol-Myers Squibb, Court of Appeal [2023] EWCA Civ 472
- VII. The second oral proceedings were held on the EPO's premises on 28 July 2023 in the presence of both parties. During these oral proceedings, the board decided:
 - not to admit D26,
 - not to admit the respondent's submission that the facts underlying T 873/21 were analogous to the facts under consideration in the present case, so that, based on that decision, the effect shown in D21 could be relied on, and

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- to refuse the appellant's request for remittal for further discussion of inventive step and claim scope with regard to *Chilo suppressalis* in view of T 939/92 and conflicting data as submitted in D25 and D21.

At the end of the oral proceedings, the chair announced the order of the present decision.

- VIII. The respondent's appeal case can be summarised as follows.
 - Order no. 2 of G 2/21 was a two-step test. The question underlying the first step ("encompassed by the technical teaching") was whether the skilled person would derive the effect from the application as filed. The question underlying the second step ("embodied by the same originally disclosed invention") was whether the skilled person would have legitimate reason to doubt that the effect could be achieved with the claimed subject-matter. The synergistic effect against Chilo suppressalis could be derived from page 8, lines 16 to 20, page 21, line 25 to page 22, line 29, and test example 3 of the application as filed. Furthermore, test example 3 showed a synergistic effect against Chilo suppressalis for the combination of clothianidin and compound I-1. In view of the high structural similarity of clothianidin and thiamethoxam, the skilled person would have had no legitimate reason to doubt that the synergistic effect against Chilo suppressalis would have been maintained if clothianidin was replaced with thiamethoxam in this test example.
 - The appellant's contention that the respondent could only rely on an effect if it had been

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experimentally proven in the application as filed for the subject-matter of claim 1 as granted was contradicted by the fact that the Enlarged Board seemingly endorsed previous decisions in which precisely this had not been the case.

- In the referring decision, the board concluded that the synergistic effect against Chilo suppressalis was to be acknowledged across the entire breadth of claim 1 as granted, provided that the respondent could rely on this effect. This aspect of the referring decision could not be revisited. Evidence D25, which was submitted by the appellant to call precisely this into question, was not to be taken into consideration. The same applied to assertions to this effect, whether or not they were based on D25. Therefore, the only unresolved issue after G 2/21 was issued was whether the respondent could rely on this effect for the subject-matter of claim 1 as granted. For the same reason, the appellant's request for remittal was to be refused.
- The appellant's reference to point 25 of the Reasons of G 2/21 was misleading as it had nothing to do with the question that order no. 2 was intended to address.
- IX. The appellant's arguments which are relevant for this decision are set out below in the reasons for the decision.
- X. The parties' requests at the end of the oral proceedings which are relevant for this decision were as follows.

The appellant requested:

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- that the decision under appeal be set aside and that the patent be revoked in its entirety,
- that D21 not be taken into account,
- that D25 and arguments based on this document be admitted,
- that Mr Ward be allowed to speak in the context of discussing any of D9, D10, D21, D22, D23 and/or D25, to address the relevance of data comprised in the aforesaid documents, if necessary,
- that D26 not be admitted,
- that the case be remitted to the opposition division in the event that the board concludes that the technical effect relied upon is derivable within the meaning of order no. 2 of G 2/21, the remittal being for further discussion of inventive step and claim scope with regard to *Chilo suppressalis* in view of T 939/92 and conflicting data as submitted in D25 and D21, and
- that the respondent's submission not be admitted according to which the facts underlying decision T 873/21 were analogous to the facts under consideration in the present case, so that, based on that decision, the effect demonstrated in D21 could be relied on.

The respondent requested:

- that the appeal be dismissed, implying that the patent be maintained as granted (main request),
- that D21 be taken into account,
- that D25 and arguments based on this document not be admitted,
- that D26 be admitted,
- that the appellant's request to remit the case to the opposition division if the technical effect relied upon is considered to be derivable within

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- the meaning of order no. 2 of G 2/21 be refused, and
- that its submission be admitted according to which the facts underlying decision T 873/21 were analogous to the facts under consideration in the present case, so that, based on that decision, the effect shown in D21 could be relied on.

Reasons for the Decision

The patent as granted, i.e. the respondent's main request before the opposition division and on appeal

- The patent as granted comprises two sets of claims for different contracting states:
 - a set of claims for the contracting states IS and
 LT and
 - a set of claims for the contracting states AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL and SE.
- 1.1 Claim 1 of the set of claims for the contracting states
 IS and LT reads as follows:

"An insecticide composition which comprises thiamethoxam and one or not less than two kinds of compounds being selected from a compound represented by the formula [Ia]:

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wherein R1 is a halogen atom or a C1-6 haloalkyl group, R2 is a halogen atom, R3 and R5 each are a C1-6 alkyl group, R4 is a hydrogen or halogen atom, and X is N, or a salt thereof."

- 1.2 Claim 1 of the set of claims for the contracting states AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL and SE additionally contains a disclaimer. This disclaimer excludes compositions which comprise thiamethoxam and at least one of three specific compounds which fall within the general definition of formula Ia.
- 1.3 It was undisputed between the parties that the discussion of inventive step, i.e. the last unresolved issue in this appeal, applies equally to both sets of claims. For the sake of simplicity, therefore, only claim 1 will be referred to below, with the corresponding discussion intended to apply equally to claim 1 of both sets of claims.
- 2. The patent in suit (paragraphs [0002] to [0004]) acknowledges, by reference to previously published patent documents, that the compounds recited in claim 1, i.e. thiamethoxam and the compound of formula Ia, were known for their insecticidal activity before the priority date of the patent. According to the patent (paragraph [0008]), mixtures of thiamethoxam

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and a compound of formula Ia can produce insecticidal activity which is greater than that which would have been expected based on their respective individual activities, i.e. a synergistic effect. The way of assessing the presence/absence of synergy between insecticides was undisputed between the parties (for further details, see the referring decision, point 2.2 of the Reasons).

The patent contains five test examples. They evaluate the presence/absence of synergy between two insecticides, i.e. of an insecticide combination, contained in the same composition. In the following, when indicating a (synergistic) interaction of two insecticides or when referring to insecticide combinations, it is no longer indicated that both insecticides are contained in the same composition.

Summary of the opposition and appeal proceedings up to and including $G\ 2/21$

4. The appellant filed an opposition against the patent under all grounds for opposition. In its decision to reject the opposition, the opposition division based its assessment of inventive step, inter alia, on the respondent's post-published evidence D21, which it accepted as proof of a synergistic effect of insecticide combinations according to claim 1 as granted.

For the following discussion, the result shown in example 4 of D21 is relevant, namely that thiamethoxam and compound I-1, i.e. an insecticide combination according to claim 1 as granted, acts synergistically against the insect species *Chilo suppressalis*.

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- On appeal, the appellant deliberately did not pursue the ground for opposition pursuant to Article 100(c) EPC in conjunction with Article 123(2) or 76(1) EPC.
- 6. First oral proceedings were held before the board, after which it issued a written interlocutory decision, the referring decision. In its decision, the board assessed the patentability of the patent as granted. The following points are worth noting.
 - (a) Sufficiency of disclosure was acknowledged (referring decision, point 9 of the Reasons).
 - (b) Novelty was acknowledged over the documents referred to by the appellant, namely D4 and D8 (referring decision, points 10.2 and 10.1 of the Reasons, respectively). Furthermore, whether or not the claimed subject-matter was a purposeful selection was considered to be irrelevant for recognising novelty (referring decision, point 10.3 of the Reasons).
 - (c) D4 was the closest prior art. The subject-matter of claim 1 as granted was distinguished from D4 in that both thiamethoxam and the compounds according to formula Ia had to be selected from the respective broader disclosures of D4 (referring decision, points 12.2 and 12.3 of the Reasons).
 - (d) The appellant's post-published evidence D23 demonstrated that the synergistic effect observed in test example 2 (Spodoptera litura) and test example 5 (Plutella xylostella) of the patent for insecticide combinations according to claim 1 as granted was not achieved across its entire breadth. Therefore, when D23, but not the respondent's postpublished evidence D21, were taken into account, the objective technical problem would have been to

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provide an alternative insecticide composition. The solution to this objective technical problem would have been obvious based on D4 alone and the main request would not be allowable (referring decision, point 12.4 of the Reasons).

(e) The respondent's post-published evidence D21 was proof of a synergistic effect against Chilo suppressalis across the entire breadth of claim 1 as granted. Therefore, when D21 and D23 were taken into account, the objective technical problem would have been to provide an insecticide composition in which the insecticides act synergistically against Chilo suppressalis. The solution to this objective technical problem would not have been obvious based on the cited prior art and the main request would be allowable (referring decision, point 12.5 of the Reasons).

The board concluded that, if D23 could be taken into account, the allowability of the main request depended on whether post-published evidence D21, filed as proof of a synergistic effect of an insecticide composition according to claim 1 as granted against *Chilo suppressalis*, could be taken into consideration. As regards the standard to apply in considering D21, the board referred the questions quoted above under point IV. to the Enlarged Board for clarification.

7. As summarised in G 2/21 (point 1 of the Reasons), these questions address two issues, namely whether the principle of free evaluation of evidence requires a qualification in respect of certain evidence relied on for a technical effect in the assessment of inventive step, and the relevant criteria to be applied with regard to such an effect.

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- 8. The following answers given by the Enlarged Board address these two issues (G 2/21, order):
 - "1. 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.
 - 2. 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."
- 8.1 In the following, these answers are referred to as order no. 1 or order no. 2. The wording "application as originally filed" from order no. 2 is abbreviated as application as filed for the sake of brevity.
- In contrast to the referred questions, which focus on whether certain evidence proving a certain technical effect can be taken into consideration, order no. 2 of the Enlarged Board focuses on whether this technical effect, which said evidence proves, can be relied on; however, the board cannot see why this difference in wording should imply any difference in substance, and the parties never put forward an argument to the contrary. In the following, the board adopts the wording used in G 2/21. Thus applying the terminology used in G 2/21, the question to be answered is whether

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the effect proven by the respondent's post-published evidence D21 can be relied on for the assessment of inventive step.

Introductory remarks

- 9. The board considers it necessary to make some introductory remarks on the question of what impact the referring decision has on the subsequent appeal proceedings, i.e. the appeal proceedings after G 2/21 was issued. This question emerged in the second oral proceedings since it was contentious between the parties whether a certain issue had actually been decided upon by the board in the referring decision and, if so, whether it could be re-opened in the second oral proceedings (see also points 21 and 22 below).
- 9.1 The EPC does not mention anything with regard to this issue. Article 111(2) EPC provides that if a board of appeal remits a case to the department of the EPO whose decision was appealed, that department is bound by the ratio decidendi of the board of appeal, in so far as the facts are the same; however, Article 111(2) EPC is not applicable to the relationship between an earlier interlocutory decision of a board and the subsequent proceedings before the same board. In the absence of any provision, two opposing positions seem possible in the abstract.
- 9.2 The first is that the referring decision together with its legal and factual assessments, has no binding effect on the subsequent proceedings before the same board after the case comes back from the Enlarged Board. In this case, the board would be free to reexamine the points already raised in the referring decision, and it would therefore be free to depart from

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the factual and legal assessments underlying the referring decision. In this case, the assessments made in the referring decision would have only a persuasive value.

- The second option is to consider that the board which, 9.3 in its referring decision, has referred a question to the Enlarged Board is bound by the referring decision's finding when the case comes back from the Enlarged Board. In this approach, the scope of the subsequent proceedings would therefore be limited to the application of the Enlarged Board's decision to the unresolved issue that gave rise to the referral and to any other issues not dealt with in that decision. The latter scenario, i.e. the existence of issues not dealt with in the referring decision at all, is conceivable, for example, where the referral concerned the admissibility of the appeal, so that the board in the referring decision refrained from considering the merits of that appeal at all.
- 9.4 The present board decided to follow the second position. Its reasons for doing so are as follows.
- 9.4.1 Admittedly, it is arguable that, in the absence of an express legal provision providing a binding effect, the board is free to re-examine and redetermine all the factual and legal issues that were the subject of the referring decision; however, the board considers that this conclusion would lead to a conflict with the requirements for referrals set out in Article 112 EPC as interpreted by the case law.
- 9.4.2 Under Article 112(1)(a) EPC, a board of appeal may, in the course of proceedings on a case, refer a question of law to the Enlarged Board if it considers that a

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decision is required. This provision is interpreted to mean that "the referred question does not have a merely theoretical significance for the original proceedings ... as would be the case if the referring board were to reach the same decision on the basis of the file regardless of the answer to the referred question" (G 3/98, point 1.2.3 of the Reasons). The assessment of whether such a referral is necessary must be based on objective criteria. Where several grounds for opposition have been raised by the opponent(s), the referral is admissible only when the board has concluded that the patent would be maintained despite the other invoked grounds for opposition which are not the subject of the referral.

- 9.4.3 These assessments are subject to a review by the Enlarged Board in examining the admissibility of the referral.
- 9.4.4 Now, if the board were to deny any binding effect of the referring decision and reopen the issues on which the board reached its conclusion in that decision, this would be in logical conflict with the requirements formulated for the admissibility of the referral. Indeed, it could lead to a situation in which the board departs from the assessment made in the referring decision and render the Enlarged Board's answer to the referred question ex post irrelevant, or, conversely, it could require a different referral from that originally made. It therefore seems consistent with this framework to regard as binding the assessments which led the board to consider a referral both admissible and necessary. This conclusion seems to be consistent, mutatis mutandis, with some decisions which consider themselves bound by their own first decision if a second appeal on the same subject-matter is

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brought before them, on the grounds that decisions by the boards of appeal are final and without any possibility to appeal, meaning that no EPO body, not even the boards of appeal, can take a new decision on facts which have already been decided (Case Law of the Boards of Appeal of the European Patent Office, 10th edition (CLBA), V.A.10.4).

9.4.5 As a consequence of this binding effect, the scope of the present proceedings is limited to applying the legal principle, as stated by the Enlarged Board, to the issues left unresolved in the referring decision. In accordance with this, the reasoning will be divided into two main parts: the first will deal in abstracto with the interpretation of order no. 2 given in G 2/21, and the second will deal with the application of this order, as interpreted by the present board, i.e. the issues left unresolved in the referring decision.

Interpretation of G 2/21

- 10. General remarks
- 10.1 In assessing whether a patent applicant or proprietor can rely on a particular technical effect for inventive step, it is self-evident that it makes little sense to consider that effect in isolation. Instead, this assessment must be made with respect to the subjectmatter for which it is relied on for inventive step, i.e. the claimed subject-matter at issue.
- 10.2 In the referring decision, the previous decisions on what was called at that time "plausibility" were classified according to the following three lines of case law: the line applying the *ab initio* plausibility

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standard, the line applying the *ab initio* implausibility standard, and lastly the line which did not apply any plausibility requirement at all ("no plausibility standard" in the referring decision).

In the first two lines of case law, the corresponding standards had to be met in order for a patent applicant or proprietor to be able to rely on a certain technical effect proven by a post-published evidence (hereinafter "purported technical effect"). It is these three standards that have been dealt with in G 2/21 culminating in order no. 2 of this decision.

11. Analysis

- 11.1 The Enlarged Board did not hold that a patent applicant or proprietor can always rely on a purported technical effect. On the contrary, the Enlarged Board, by way of order no. 2, established requirement(s) that must be met. The Enlarged Board thus did not give patent applicants and proprietors "carte blanche" to be able to rely on a purported technical effect at any stage of the proceedings. Therefore, it can be concluded from order no. 2 that patent applicants and proprietors should not be able to invoke any technical effect at will. Instead, the focus on the application as filed and the filing date (G 2/21, point 93 of the Reasons) is intended to prevent the filing of applications directed purely to speculative (armchair) inventions made only after the filing date.
- 11.2 The requirement(s) established in order no. 2 has (have) to be looked at with the eyes of the skilled person "having the common general knowledge in mind, and based on the application as originally filed". Even though not stated explicitly in order no. 2, in line

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with what has been set out in the previous point, the common general knowledge must be that existing on the filing date of the application.

- 11.3 Order no. 2 requires that, for a patent applicant or proprietor to be able to rely on a purported technical effect for inventive step, the skilled person would derive said effect as being
 - (i) encompassed by the technical teaching and
 - (ii) embodied by the same originally disclosed invention.
- 11.3.2 In formulating order no. 2 in this way, the Enlarged Board did not refer to any of the plausibility standards identified by the board in its referring decision, either by mentioning these standards specifically or by using wording reflecting terminology underlying these standards. On the contrary, it used new legal terminology that had not been applied so far in the context of inventive step. The Enlarged Board may have chosen to do so for two reasons, namely either because it considered all three plausibility standards to be wrong and wanted them to be replaced with the requirement(s) of order no. 2, or because it considered all three standards to reflect the same requirement and wanted to condense this requirement by that (or those) defined in its order no. 2. The actual reason why the Enlarged Board formulated order no. 2 as it did may, however, be left unanswered. What matters is that when deciding whether a patent applicant or proprietor may rely on a purported technical effect for inventive step, it is the requirement(s) defined by the Enlarged

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Board in order no. 2 that has (have) to be applied, rather than simply using any rationale developed in the previous plausibility case law.

- 11.4 Both requirements (i) and (ii) in order no. 2 are linked with an "and". The board interprets this to mean that both are separate requirements which must be met cumulatively for a patent applicant or proprietor to be able to rely on the purported technical effect. This was also the appellant's view at the second oral proceedings.
- 11.5 Requirements (i) and (ii) use the terms "technical teaching" and "invention". The EPC does not contain the concept of technical teaching, while a tautological definition of the term "invention" is considered to be formulated at Rule 42(1)(c) EPC, namely as a solution to a technical problem.
- In the case law the term "invention" has been defined 11.6 by the Enlarged Board only indirectly by adopting the reasoning in the "Rote Taube" decision by the German Federal Court of Justice (BGH 27.3.1069, X ZB 15/67: "Lehre zum planmäßigen Handeln unter Einsatz beherrschbarer Naturkräfte zur Erreichung eines kausal übersehbaren Erfolges"; translation given in G 1/19 (point 75 of the Reasons): "a teaching to methodically utilize controllable natural forces to achieve a causal, perceivable result"). According to G 2/07 and G 1/19, the "Rote Taube" decision stated that the term "invention" required (G 2/07, point 6.4.2.1 of the Reasons) or implied (G 1/19, point 75 of the decision) a technical teaching. In the present board's view, this definition of the term "invention" does not reveal any difference from the term "technical teaching" which

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would justify the assumption that the two terms have a different meaning.

- 11.7 In fact, according to established case law, a technical teaching is defined in terms very similar to the way in which an invention is defined in the "Rote Taube" decision, namely as "an instruction addressed to a skilled person as to how to solve a particular technical problem using particular technical means" (G 1/19, point 24 of the decision; CLBA I.D.9.2.4).
- 11.8 As set out above, in the board's view G 2/21 seeks to prevent speculative inventions. In turn, the broader the application as filed, the more likely it is that the invention defined in it was speculative from the outset. Hence, in order to fulfil this purpose of G 2/21, the assessment as regards requirements (i) and (ii) of order no. 2 has to be made based on the broadest technical teaching of the application as filed contained in it with regard to the claimed subjectmatter.
- 11.9 Against this background, the term "technical teaching" in requirement (i) has the same meaning as the term "same originally disclosed invention" in requirement (ii), namely the broadest technical teaching of the application as filed contained in it with regard to the claimed subject-matter.
- 11.10 In the light of this, for requirement (i) of order no. 2 to be met, the purported technical effect together with the claimed subject-matter need only be conceptually comprised by the broadest technical teaching of the application as filed. This in turn means that said effect need not be literally disclosed

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in it by way of a positive verbal statement (see also point 11.13.1 below). Instead, for example, it may also be sufficient that the skilled person, having the common general knowledge in mind, and based on the application as filed, recognises that said effect is necessarily relevant to the claimed subject-matter.

11.11 As regards the second requirement (ii) formulated in order no. 2, namely that the effect must be derivable as being embodied by the same originally disclosed invention, in the board's view, the following question is to be asked: would the skilled person, having the common general knowledge on the filing date in mind, and based on the application as filed, have legitimate reason to doubt that the technical teaching at issue, i.e. the purported technical effect together with the claimed subject-matter, is an embodiment of the originally disclosed invention, i.e. the broadest technical teaching of the application as filed?

In other words again, the question to be asked can also be formulated as it was by the respondent: would the skilled person, having the common general knowledge on the filing date in mind, and based on the application as filed, have legitimate reason to doubt that the purported technical effect can be achieved with the claimed subject-matter?

Requirement (ii) is met unless the above question is to be answered in the affirmative.

11.12 Contrary to the appellant's argument, the board takes the view that it is not necessarily a precondition for requirement (ii) to be satisfied that the application as filed contains experimental proof that the purported

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technical effect is actually achieved with the claimed subject-matter at issue, for the following reasons:

11.12.1 In point 93 of its decision, the Enlarged Board stated (emphasis added):

"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."

If an effect in principle can be relied on even at a later stage, i.e. after the filing date, the effect and any experimental proof of it need not necessarily be contained in the application as filed.

- 11.12.2 Furthermore, if requirement (ii) were indeed to be understood as requiring experimental proof of the purported technical effect, the practical consequence would be that patent applicants and proprietors could limit themselves only to subject-matter for which there is corresponding experimental proof in the application as filed; however, this is in conflict with the fact, as also pointed out by the case law referred to by the Enlarged Board (G 2/21, point 60 of the Reasons), "that the EPC required no experimental proof for patentability and ... that the disclosure of experimental data or results in the application as filed and/or post-published evidence was not always required to establish that the claimed subject-matter solved the objective technical problem."
- 11.12.3 Moreover, the conclusion that experimental proof is not always required in the application as filed is also in line with the Enlarged Board's statements about

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sufficiency of disclosure (G 2/21, point 77 of the Reasons). The Enlarged Board held that the scope of reliance on post-published evidence is much narrower under Article 83 EPC, at least for second medical use claims, than under Article 56 EPC and that the proof of a purported therapeutic effect has to be provided in the application as filed. This can only mean that, conversely, the scope of reliance must be much broader under Article 56 EPC and requirement (ii) cannot be interpreted as requiring the application as filed to always have to contain e.g. experimental proof of the purported technical effect for the claimed subjectmatter at issue.

- 11.12.4 Lastly, as argued by the respondent, this conclusion is also in line with the observation that the Enlarged Board seems to have endorsed decisions under points 64 to 69 in which the purported technical effect could be relied on despite the fact that experimental evidence was missing from the application as filed (T 1442/18, point 7.1 of the Reasons; T 536/07, point 9 of the Reasons; T 1642/07, point 20 of the Reasons; T 1677/11, point 9.5.1 of the Reasons; T 184/16, points 2.5 and 2.6 of the Reasons; T 31/18, point 2.5.2 of the Reasons; for appropriate quotes from these decisions, see the respondent's letter dated 25 July 2023, pages 4 to 7).
- 11.13 Contrary to the appellant's argument, the board takes the view that it is also not necessarily a precondition for requirement (ii) to be fulfilled that the application as filed contains a positive verbal statement about the purported technical effect.
- 11.13.1 More specifically, the board considers it of little use to focus on selected wording of the application as

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filed. The question of whether requirement (ii) is met can only be answered against the background of the entirety of the application as filed. In addition to this, as conceded by the appellant itself at the oral proceedings, understanding requirement (ii) to mean that a positive verbal statement about the effect must be present in the application as filed would correspond to, or at least come very close to, the very strict gold standard of a direct and unambiguous disclosure developed by the Enlarged Board for assessing the requirements of, for example, Article 123(2) EPC (see the Enlarged Board's decision G 2/10). The board is convinced that such an understanding cannot have been the Enlarged Board's intention in its decision G 2/21. The Enlarged Board can be safely assumed to have taken its decision carefully and thoroughly considered which words to use; however, neither order no. 2 nor e.g. point 72 of the Reasons uses the words associated with the gold standard, but, on the contrary, they apply less strict words. They speak of "derivable"/"derive" but not of e.g. "directly and unambiguously derivable".

- 11.13.2 Furthermore, a strict understanding of requirement (ii) as representing the gold standard would essentially render requirement (i) superfluous, which goes against the above conclusion and in fact the appellant's own argument made in this respect.
- 11.13.3 Lastly, in point 93 of its decision, the Enlarged Board essentially reiterates order no. 2 and concludes with the words "because such an effect does not change the nature of the claimed invention." The fact that an effect relied on must not change the nature of the claimed invention is certainly less strict than said effect having to be directly and unambiguously derivable.

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11.14 As regards requirement (ii) of order no. 2, the board's overall conclusion is thus the following:

Requirement (ii) is met unless the skilled person, having the common general knowledge on the filing date in mind, and based on the application as filed, would have legitimate reason to doubt that the purported technical effect can be achieved with the claimed subject-matter. For requirement (ii) to be satisfied, experimental proof of the purported technical effect or a positive verbal statement is not necessarily required in the application as filed.

National case law

- 12. After the UK Supreme Court had delivered the judgment of 14 November 2018, Generics (UK) (trading as Mylan) vs. Warner-Lambert Company Ltd ("the UK Supreme Court decision") and also after G 2/21 was issued, the UK Court of Appeal issued decision D27 on what is generally referred to as "the apixaban case". In the present case, D27 was filed by the appellant in support of its interpretation of G 2/21. D27 essentially held that
 - the majority opinion on plausibility in the decision of the UK Supreme Court with respect to second medical use claims was closest to what the board in the referring decision called the ab initio plausibility standard (D27, point 94: "It also follows that the standard of plausibility which should be applied is the standard adopted by the majority in Warner-Lambert, not the standard espoused by the minority or some

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other "less strict" standard. It is fair to say that the standard adopted by the majority corresponds to the "ab initio plausibility" test identified in Sumitomo, while the standard espoused by the minority corresponds to the "ab initio implausibility" test."), and

(ii) the same majority opinion was applicable to
 product claims (D27, point 92:
 "Furthermore, the underlying principles are
 applicable as much to claims to single
 chemical compounds as to claims to classes
 of compounds and second medical use
 claims.").

Hence, according to D27, the "ab initio plausibility standard" has to be applied when examining effects in relation to inventive step of product claims. The board's interpretation of G 2/21 is different from this in that instead of the "ab initio plausibility standard", the standard as defined in order no. 2 of G 2/21 and as interpreted above in points 10 and 11 needs to be applied; however, as conceded by the appellant during the second oral proceedings, as a decision of a national court D27 has no binding effect on the present board.

In the same way as the present decision, the decision taken on the apixaban case by the Court of Appeal of The Hague of 15 August 2023 (no. 200.327.532/01 and 200.328.173/01, published after the date of and hence not relevant for the present decision, points 6.7-6.9 and 6.14) held that order no. 2 of G 2/21 does not require, for a patent applicant or proprietor to be able to rely on a purported technical effect, the application as filed to always have to include evidence

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that the purported technical effect actually occurs.

However, unlike the present decision, the decision by the Dutch Court of Appeal considers the criteria of order no. 2 to be met only if the application as filed "expressly and specifically designates the relevant effect as the primary objective of the patent" (point 6.15). As set out above (see in particular points 11.10 and 11.14), in the board's view, a positive verbal statement about the purported effect need not necessarily be present in the application as filed for the requirements of order no. 2 to be met.

Application of the order to the present case

13. In the present case, the purported technical effect is the synergistic activity against *Chilo suppressalis* as shown in post-published evidence D21 (example 4) for a specific composition according to claim 1 as granted. This effect is relied on for the subject-matter of claim 1 as granted.

The crucial point in the present appeal is that, at least insofar as it is relied on for inventive step for the subject-matter of claim 1 as granted, this proof or similar proof of a synergistic effect against *Chilo suppressalis* is not contained in the application as filed.

14. Against this background, the parties disagreed on whether the purported technical effect met the requirements of order no. 2 of G 2/21.

As set out above, the two requirements (i) and (ii) established in order no. 2 must be looked at with the

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skilled person's eye, taking into account their common general knowledge on the filing date.

It was the appellant's constant position that synergism is very rare and unpredictable. At the second oral proceedings before the board, the appellant stated that this was the relevant common general knowledge within the meaning of order no. 2. This was never disputed by the respondent and is accepted by the board below.

15. In the light of what has been stated above and translated to the present case with regard to the subject-matter of claim 1 as granted, the broadest technical teaching of the application as filed, or the originally disclosed invention, can be considered to be that a combination of a compound represented by the general formula I

with a neonicotinoid compound represented by the general formula II

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can result in a synergistic effect against insects; see page 4 and page 8, lines 16 to 20 of the application as filed (the definitions of the various substituents have been omitted for the sake of brevity).

In the words of the above definition of the technical teaching, the combination of insecticides of formulas I and II corresponds to the "particular technical means" by which the synergistic effect against insects, the "particular technical problem", can be achieved.

16. Requirement (i), "encompassed by the technical teaching"

The purported technical effect is the synergistic activity against *Chilo suppressalis* and it is relied on for the subject-matter of claim 1 as granted. Because

- the compounds of formula Ia of claim 1 as granted are a subset of those of formula I of the broadest technical teaching,
- thiamethoxam as referred to in claim 1 as granted falls within the definition of formula II of the broadest technical teaching and
- Chilo suppressalis is a specific insect species and therefore falls under the corresponding broader term "insects" in the broadest technical teaching,

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the board considers that the purported technical effect, when relied on for inventive step for the subject-matter of claim 1 as granted, is encompassed by the broadest technical teaching of the application as filed defined above.

- 17. Requirement (ii), "embodied by the same originally disclosed invention"
- The appellant argued that this requirement was satisfied only if the application as filed contained either experimental proof that the purported technical effect was actually achieved with the claimed subject-matter at issue or a comparable positive verbal statement. Therefore, the application as filed had to contain an example showing that an insecticide combination according to claim 1 as granted acted synergistically against Chilo suppressalis or a statement like "a combination of thiamethoxam with an insecticide according to formula Ia acts synergistically against Chilo suppressalis".

The application as filed did not contain such experimental proof. Test example 3 of the application as filed was the only example relating to *Chilo suppressalis*, but tested an insecticide composition which was not in accordance with claim 1 as granted.

Furthermore, the wording of the application as filed, such as

"[a] combination of a compound represented by the general **formula** [I] with a neonicotinoid compound represented by the general **formula** [II] can result in the development or elicitation of a ...

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synergistic effect" (page 8, lines 16 to 19;
emphases added)

was entirely speculative ("can") and did not even relate to compounds of formula Ia or thiamethoxam, but to those of the more general formulas I and II, respectively. Therefore, the application as filed did not contain a positive statement to this effect, either.

However, as set out above, experimental proof or a positive verbal statement of the purported effect is not a prerequisite for requirement (ii) to be met. Hence, the mere fact that the synergistic effect against *Chilo suppressalis* is not proven or explicitly mentioned for insecticide combinations according to claim 1 as granted in the application as filed, as such, does not go against it being taken into account.

- 17.2 With regard to the question of whether requirement (ii) is satisfied, the appellant additionally referred to the test examples and page 21, line 23 to page 22, line 29 of the application as filed as well as the common general knowledge as set out above. These test examples and the passage of text disclose the following:
 - Test examples 1 to 5 demonstrate a synergistic insecticidal effect for different insecticide combinations. More specifically, the following results are given (the suffixes -a and -b have been added by the board to distinguish between examples which are disclosed under the heading of the same test example):
 - Test example 1: **clothianidin** and **compound I-2** act synergistically against **Spodoptera litura**.

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- Test example 2-a: thiamethoxam and compound I-1 act synergistically against *Spodoptera litura*.
- Test example 2-b: clothianidin and compound I-6 act synergistically against *Spodoptera litura*.
- Test example 3-a: clothianidin and compound I-1 act synergistically against *Chilo suppressalis*.
- Test example 3-b: dinotefuran and compound I-5 act synergistically against *Chilo suppressalis*.
- Test example 4-a: dinotefuran and compound I-2 act synergistically against Plutella xylostella.
- Test example 4-b: dinotefuran and compound I-3 act synergistically against Plutella xylostella.
- Test example 5: thiamethoxam and compound I-4 act synergistically against Plutella xylostella.

It was common ground between the parties that compounds I-1 to I-6 are in accordance with formula Ia in claim 1 as granted.

- The passage on page 21, line 23 to page 22, line 29 discloses a rather long list of insect species which can (allegedly) be controlled by the compositions in the application as filed. This list includes, among many other insects species, Spodoptera litura, Plutella xylostella and Chilo suppressalis.
- 17.3 The appellant essentially argued as follows.

From the above insecticide combinations only those which comprised thiamethoxam, i.e. test examples 2-a and 5, were in accordance with claim 1 as granted. These combinations were tested against *Spodoptera litura* and *Plutella xylostella*, respectively. In view of their common general knowledge that synergism is rare and unpredictable, the skilled person would not

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expect that the insecticide compositions in these examples or those in claim 1 as granted would also act synergistically against *Chilo suppressalis*.

Similarly, the insecticide combinations tested against Chilo suppressalis (test examples 3-a and 3-b) were not in accordance with claim 1 as granted because they comprised clothianidin or dinotefuran instead of thiamethoxam. In view of their common general knowledge, the skilled person would not expect that the synergistic effect against Chilo suppressalis would be maintained when the insecticide clothianidin or dinotefuran was replaced with thiamethoxam.

Furthermore, the list of insect species on page 21, line 23 to page 22, line 29 of the application as filed mentioned *Chilo suppressalis*; however, this list was to be understood merely as a wish list, i.e. a list including all those insect species which generally caused problems in agriculture and against which a synergistic effect was desired. In view of their common general knowledge, the skilled person would not expect the insecticide compositions in claim 1 as granted to act synergistically against each of the insect species mentioned in this list.

- 17.4 The board is not convinced by these arguments for the following reasons.
- 17.4.1 As set out above, test example 3-a demonstrates a synergistic effect against *Chilo suppressalis* for a compound of formula Ia in combination with clothianidin. As submitted by the respondent and not disputed by the appellant, clothianidin and thiamethoxam are structurally very similar. Therefore, the board agrees with the respondent's argument that

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the skilled person would have no legitimate reason to doubt that the synergistic effect against *Chilo* suppressalis would be maintained when replacing clothianidin with thiamethoxam in the insecticide combination in test example 3-a.

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- 17.4.2 The board acknowledges that there might be a legitimate reason to doubt that the specific purported technical effect can be achieved if this effect is irreconcilable with the common general knowledge and that this may lead to the conclusion that requirement (ii) is not satisfied, at least in cases in which the application as filed does not contain support for the effect by experimental proof, for example; however, the appellant has not provided any concrete evidence, derived from the common general knowledge, as to why the skilled person would have legitimate reason to doubt that the specific purported technical effect can be achieved in the present case, i.e. the synergistic effect of the insecticide combination in claim 1 as granted against Chilo suppressalis. The appellant has also not provided any concrete evidence, derived from the common general knowledge, as to why the skilled person would have legitimate reason to doubt that the synergistic effect against Chilo suppressalis is not maintained when clothianidin is replaced by thiamethoxam in the composition in test example 3-a. Therefore, the appellant has in fact not demonstrated that, in the present case, the specific purported technical effect is irreconcilable with the common general knowledge.
- 17.4.3 Considering that an inventive step is often acknowledged with reference to the common general knowledge that synergism is rare and unpredictable, the appellant's attempt to question the reliance on the specific purported technical effect is basically a

circular argument in disguise: the respondent cannot rely on the (surprising) specific purported technical effect because this effect is surprising. A synergistic effect, however, does not deserve a special position compared with other effects on which patent applicants or proprietors regularly rely for inventive step. To successfully question whether a patent applicant or proprietor can rely on a specific purported technical effect requires a legitimate reason to doubt said effect, and that must be more than the mere argument that the effect is surprising.

17.4.4 In the board's view, even just the considerations above demonstrate that the skilled person, having the common general knowledge on the filing date in mind and based on the application as filed, would have no legitimate reason to doubt that the purported technical effect can actually be achieved with the subject-matter of claim 1 as granted.

In addition to the above, in the present case the application as filed demonstrates synergistic insecticidal combinations experimentally within certain limits. It is in the very nature of the present invention, which is based on the combination of two insecticides and their effect on insects, that, realistically speaking, the patent proprietor cannot be expected to have provided proof in the application as filed of the synergistic insecticidal effect for every conceivable combination of insecticides against every conceivable insect species. As set out above, test examples 1 to 5 of the application as filed show a synergistic effect for eight different insecticide combinations, each against one of three insect species (Spodoptera litura, Chilo suppressalis and Plutella xylostella). The insecticide combinations in question

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each comprise one of three different insecticides of general formula II (clothianidin, thiamethoxam, dinotefuran) and one of six different insecticides of general formula I (compounds I-1 to I-6). Therefore, in the board's judgement, these test examples exhibit a reasonable degree of variation with respect to the insecticides and insect species, and it is not apparent to the board why the skilled person, based on the application as filed, should have legitimate reason to doubt that the combination of insecticides of formulas I and II do not act synergistically against at least those insect species which are the object of the test examples, i.e. also Chilo suppressalis. A fortiori this must also apply to subsets of formulas I and II, such as the insecticide combinations in claim 1 as granted, which are based on compounds of formula Ia and thiamethoxam.

- 17.5 Therefore, based on the test examples of the application as filed, the skilled person would have no legitimate reason to doubt that the purported technical effect can be achieved with the subject-matter of claim 1 as granted. The purported technical effect is embodied by the same originally disclosed invention.
- 18. It can be concluded that the respondent may rely on the purported technical effect based on the application as filed.
- 19. In the present case, the application is a divisional application. The board agrees with the appellant that order no. 2 has to be satisfied not only based on the divisional application as filed, but also based on the parent application as filed. This is for the following reasons.

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- 19.1 The text of a divisional application as filed may be (and often is) different from that of the parent application as filed such that, for the possibility of relying on a purported technical effect, different results could be arrived at depending on whether the assessment is based on the divisional or the parent application as filed. For instance, the conclusion that the effect meets the requirements of order no. 2 could be arrived at based on the divisional application as filed, but not based on the parent application as filed. This would mean that, contrary to the board's interpretation of order no. 2 above (see point 11.1), the invention would have to be considered as having been made only after the filing date of the parent application. Order no. 2 therefore cannot be understood as meaning that only the divisional application as filed would be relevant.
- 19.2 For the present case, it can be concluded that the respondent can rely on the purported technical effect if it satisfies order no. 2 not only based on the divisional application as filed (as acknowledged above), but also based on the parent application as filed.
- 19.3 Indeed, for the parent application as filed, the definition of the broadest technical teaching is exactly the same as that for the divisional application as filed (see page 9, lines 19 to 25 and pages 4 to 5 of the parent application as filed). Hence, the board cannot see any reason why the assessment as to whether the purported technical effect satisfies requirement (i) should lead to a different result based on the parent application as filed. The fact that the subjectmatter of claim 1 of the divisional application as filed is more limited than that of claim 1 of the

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parent application as filed, as pointed out by the appellant, is merely a voluntary restriction of the preliminary scope of protection on the part of the respondent when filing the divisional application; however, it does not change the broadest technical teaching and therefore cannot contradict the above conclusion.

Moreover, the test examples in the divisional application as filed are also contained in the parent application as filed. Hence, the board cannot see any reason why the above assessment as to whether the purported technical effect satisfies requirement (ii) should lead to a different result based on the parent application as filed.

19.4 Therefore, the respondent may rely on the purported technical effect based on the parent application as filed, too.

Is the purported technical effect achieved across the entire breadth of claim 1 as granted?

- 20. As set out above, one of the appellant's arguments as to why, in its opinion, the effect proven by D21 could not be relied upon was that this effect did not meet the requirements of order no. 2 of G 2/21.
- 21. In addition to this argument, the appellant was of the view that the effect could not be relied on for a different reason, namely because it was not achieved across the entire breadth of claim 1 as granted. To prove that this was not the case, the appellant filed D25 after G 2/21 was issued. Based on D25, the appellant argued that an insecticide combination according to claim 1 as granted, i.e. the combination

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of thiamethoxam and chlorantraniliprole, did not act synergistically against *Chilo suppressalis*, at least not at all weight ratios. In addition, again after G 2/21 was issued, the appellant alleged that certain features present in example 4 of D21 were missing from claim 1 as granted, more specifically the use of two rather than three or more specific compounds in a specific concentration and weight ratio. For this reason too, D21 could not prove that the purported technical effect was achieved by the claimed insecticide combinations across the entire breadth of claim 1.

- 22. According to the appellant, the question of whether the purported technical effect was achieved across the entire breadth of claim 1 as granted had not been decided conclusively in the referring decision.

 Moreover, order no. 1 of G 2/21 made it clear that D25 could not be disregarded.
- As set out above, the board conducted a comprehensive analysis of inventive step in the referring decision. It carried out, inter alia, a problem-solution approach with D21, evaluating the appellant's argument that it was inconceivable that the purported technical effect was achieved across the entire breadth of claim 1 as granted because formula Ia covered over 10 million compounds. The board stated (referring decision, point 12.5.1 of the Reasons):

"Therefore, the synergistic effect observed in example 4 of D21 against the insect species Chilo suppressalis can be acknowledged to be achieved over the entire breadth of claim 1 provided D21 can be taken into account."

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In view of the above, the main request was finally considered to be allowable provided that the patent proprietor, following the Enlarged Board's decision, which was still to be issued at that time, could rely on the purported technical effect. In the event that the effect could not be relied on in view of the Enlarged Board's decision, the board concluded that the main request would not be allowable (referring decision, point 12.6 of the Reasons).

Therefore, the board's assessment that, inter alia, the synergistic effect against Chilo suppressalis, provided that it can be relied on in view of the Enlarged Board's decision still to be taken, is to be acknowledged across the entire breadth of claim 1 as granted was an integral part of the reasoning which led the board to consider the referral admissible and necessary.

Contrary to the appellant's argument, this conclusion does not contradict point 15 (page 59, paragraphs 1 and 4) of the referring decision. There, in assessing the parties' comments on the referred questions proposed by the board, it is merely clarified, fully in accordance with the ratio decidendi following from points 12.5.1 and 12.6 of the referring decision, that a purported technical effect cannot be relied on unless it is achieved across the entire breadth of the claim at issue.

The question is therefore whether, in a situation such as the present one, in which the board issued the referring decision, the Enlarged Board issued a decision with answers to the questions put forward in the referring decision and the board continues the appeal proceedings in view of the Enlarged Board's

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decision, the factual and legal assessments made in the referring decision are binding on the board. As explained in point 9 of this decision, the board has answered this question in the affirmative. In view of this binding effect, submissions filed after the date of the referring decision which are intended to call its ratio decidendi into question are not to be taken into account in the present case.

- Finally, and contrary to the appellant's argument, it cannot be inferred from order no. 1 of G 2/21 that post-published evidence D25 must be taken into account, either. Order no. 1 merely provides that post-published evidence submitted as proof of a purported technical effect may not be disregarded merely because it is post-published. This does not preclude the fact that post-published evidence may/must be disregarded for other reasons. Such other reasons are present here; see above.
- 22.4 In accordance with this, the board concluded at the second oral proceedings that D25 and any assertions based on it, as well as the appellant's additional submissions identified in point 21 above, cannot be taken into account.
- 22.5 Since D25 was not to be taken into account, it was not necessary to decide at the second oral proceedings whether it could be admitted into the proceedings.

Further arguments by the appellant

23. The appellant referred to point 12.3 of the referring decision, which stated that the subject-matter of claim 1 as granted was a selection of a range of compositions from a broader range of compositions as

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disclosed in D4. Such a selection had to be purposeful, i.e. the purported technical effect had to be achieved only within the scope of claim 1 as granted but not outside of it, in order for the patent proprietor to be able to rely on this effect. This "purposeful selection" requirement was set out in G 2/21 (point 25 of the Reasons), stipulating that "[t]he technical problem must be derived from effects directly and causally related to the technical features of the claimed invention" (emphasis added). The insecticide combination in, for example, test example 3-a of the patent corresponded to D4 and not to claim 1 as granted, but nevertheless exhibited a synergistic effect against Chilo suppressalis. Therefore, the purported technical effect at least did not occur only within the scope of claim 1 as granted. The respondent therefore could not rely on the purported technical effect with regard to point 25 of the Reasons of G 2/21.

24. The "purposeful selection" requirement is the last of three requirements developed in earlier decisions by the boards for the novelty of selections from numerical ranges. In the referring decision (point 10.3 of the Reasons), the board had already explained why these criteria are not applicable in the present case. Quite apart from this, the board is convinced that the appellant's interpretation of point 25 of the Reasons of G 2/21 is wrong for the following reasons. Point 25 is a rather short paragraph and, as indicated at the end of it, reproduces what is stated in CLBA I.D.4.1. While this chapter states with reference to e.g. T 939/92 that a technical effect needs to be achieved across the entire breadth of the claim at issue in order for a patent applicant or proprietor to be able to formulate an objective technical problem based on

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this effect, it does not mention anything about selection inventions. Consequently, there is no basis for the appellant's interpretation of point 25 of the Reasons of G 2/21 as it setting out some sort of "purposeful selection" requirement. All that point 25 states is that the effects need to be directly and causally related to the technical features of the claimed invention, a point already decided in the referring decision. Moreover, the respondent cannot be blamed for claiming less than it could have, i.e. that the purported technical effect is also achieved outside the scope of claim 1 as granted.

The appellant's request for remittal

- 25. The appellant requested "that the case be remitted to the opposition division in the event that the board concludes that the technical effect relied on is derivable within the meaning of order no. 2 of G 2/21, the remittal being for further discussion of inventive step and claim scope with regard to Chilo suppressalis in view of T 939/92 and conflicting data as submitted in D25 and D21". During the second oral proceedings, the appellant clarified that this request meant that, in the event that the respondent may rely on the purported technical effect for inventive step, it was requested that the case be remitted in order to consider the question of whether said effect is achieved across the entire breadth of claim 1 as granted before the opposition division in view of the conflicting data as submitted in D25 and D21.
- 26. The respondent requested that this request be refused.
- 27. As set out above, the board had already ruled on this very issue in favour of the respondent in the referring

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decision: insofar as the respondent may rely on the purported technical effect in view of the Enlarged Board's decision, which was still to be issued at that time, it was also to be recognised across the entire breadth of claim 1 as granted. Hence, there is nothing left unresolved in this respect which could be examined by the opposition division upon remittal. Therefore, the board decided to refuse the appellant's request for remittal.

The appellant's issues with the referring decision

- 28. When carrying out the problem-solution approach in the referring decision with D21, having previously come to the conclusion that the purported technical effect could be acknowledged to be achieved across the entire breadth of claim 1 as granted, the board formulated the objective technical problem as that of providing an insecticide composition in which the insecticides act synergistically against Chilo suppressalis. The board also explained that it did not take issue with the formulation of this more specific objective technical problem, which also includes a specific insect species. This was "because it would be technically nonsensical to require synergism against each and every insect species" (referring decision, point 12.5.2 of the Reasons).
- 29. The appellant took exception to this statement and put forward the following arguments.

The test examples of the patent, which tested compositions according claim 1 as granted and exhibited a synergistic effect against *Spodoptera litura* and *Plutella xylostella*, had been addressed early on by the appellant, with D23 demonstrating that said effect was

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not achieved across the entire breadth of claim 1 as granted. After the filing date, the respondent had provided test data for many more insect species for compositions according to claim 1 as granted, such as D21 and the synergistic effect against Chilo suppressalis; however, given the common general knowledge that synergism was rare and unpredictable, it could not have been expected that, as was done in the referring decision, the purported technical effect would eventually have to be discussed in relation to the subject-matter of claim 1 as granted. This view was even supported in the referring decision itself by the above statement. Hence, D25 could not have been filed earlier and was to be admitted.

If it were nonsensical to require synergism against each and every insect species, it would be equally nonsensical to concede that a synergistic effect is achieved across the entire breadth of claim 1, i.e. for each and every conceivable combination of insecticides. The referring decision contradicted itself, since on the one hand it denied the necessity of synergism against all insect species, but on the other hand it recognised a synergistic effect across the entire breadth of claim 1 as granted. Hence, it could not be concluded that the purported technical effect was in fact achieved across the entire breadth of claim 1 as granted.

30. Strictly speaking, these arguments are not relevant in the present case, as they either concern the admittance of D25 (which did not need to be decided upon because D25 is not to be taken into account; see points 20 to 22.5) or the question of the extent to which the purported technical effect is achieved across the entire breadth of claim 1 as granted (the answer to

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which is part of the ratio decidendi of the referring decision and therefore cannot be revisited).

Nevertheless, the board would like to provide the following comments.

30.1 D21 had already been filed before the opposition division. Therefore, the appellant would have had sufficient time to file appropriate counter-evidence prior to the first oral proceedings before the board; however, the appellant deliberately chose not to do this. It is true that the respondent formulated the more specific objective technical problem based on a synergistic effect against Chilo suppressalis only at the first oral proceedings before the board; however, the appellant did not take issue with the late formulation of this objective technical problem (by e.g. requesting that it not be admitted), but entered into a discussion on its merits, putting forward an argument as to why the purported technical effect was not achieved across the entire breadth of claim 1 as granted.

Moreover, it had already been recognised in numerous other decisions prior to the first oral proceedings before the board that patent applicants or proprietors could rely on a purported technical effect for inventive step, even if this effect was proven for the claimed subject-matter only after the filing date (see above). Therefore, the appellant could not simply rely on not having to provide counter-evidence for D21 in general or the synergistic effect against *Chilo suppressalis* demonstrated in that document in particular.

The board therefore cannot follow the appellant's criticism regarding how the proceedings evolved with

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regard to the purported technical effect and the formulation of the objective technical problem based on it.

30.2 The question of whether it is sufficient for the acknowledgement of inventive step that a synergistic effect is achieved against only one insect species is entirely different from, and has nothing to do with, the question of whether this effect is actually achieved across the entire breadth of claim 1 as granted. All in all, the appellant's criticism of the alleged contradiction in the referring decision seems instead to be a criticism of the fact that broad product protection is granted on the basis of a purported technical effect of very small scope, namely the synergistic effect against only one insect species; however, the board is not aware of any benchmark or threshold for how extensive a purported technical effect must be in order to justify broad product protection, and none has been cited by the appellant, either.

Further points

- 31. The appellant requested that Mr Ward be allowed to speak in the context of discussing any of D9, D10, D21, D22, D23 and/or D25, to address the relevance of data comprised in the aforesaid documents, if necessary. During the oral proceedings, however, the appellant's representatives did not ask the board to allow Mr Ward to speak. Hence, there was no need to decide on this request at the oral proceedings.
- 32. At the oral proceedings, the board decided:
 - not to admit the respondent's document D26 and

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- not to admit the respondent's submission that the facts underlying T 873/21 were analogous to the facts under consideration in the present case, so that, based on that decision, the effect demonstrated in D21 could be relied on.

The board's final decision in these proceedings is to grant the respondent's main request, i.e. to dismiss the appeal. Therefore, the respondent is not adversely affected by the above procedural decisions, and there is no need to give reasons for them.

- 32.1 However, the board considers it appropriate to explain why the respondent's argument that the reference to T 873/21 should be taken into account because it was always possible to refer to case law is not convincing.
- According to the explanatory notes made as regards
 Article 12(4) RPBA 2020, submissions by a party which
 concern only the interpretation of the law are not an
 amendment within the meaning of this Article; however,
 a distinction must be made between an interpretation of
 the law based on a previous decision by the boards of
 appeal on the one hand and a reference to the specific
 factual and legal assessments of this previous decision
 and the allegation that this factual situation is the
 same as in the case pending before the board on the
 other hand.

As regards the interpretation of the law, the boards of appeal (and professional representatives; see, for instance, R 17/09, point 8 of the Reasons) are expected to be familiar with the relevant case law relating to the EPC. The boards must apply the EPC correctly and examine the relevant case law ex officio. If there is a contradiction between the interpretation of the EPC the

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board intends to follow in the case pending before it and the interpretation adopted in the earlier decision, the board in the case pending before it must explain the reason for its deviation. In some circumstances, a referral may even be appropriate or necessary. Therefore, any reference to principles of law or interpretation of the EPC set out in previous decisions must be taken into account.

However, if a party argues that the specific factual and technical situation underlying a particular earlier decision is similar to the factual and technical situation underlying the case pending before the board, such that the way in which the EPC was applied in that earlier decision should be followed or taken into account when applying the EPC to the pending case, as the respondent did by referring the present board to T 873/21, this submission is not simply an interpretation of the law made by reference to an earlier decision. On the contrary, it contains both a statement of fact and its legal qualification. In order for the board to deal with such a submission in the case pending before it, it must examine the factual situation on which the earlier decision is based and assess whether it is similar to or different from the one underlying the pending case. In general, doing so requires not only a careful reading of the reasoning, but also consultation of the facts and submissions in the case underlying the earlier decision. In some instances, other documents, such as the patent specification, a piece of prior art or further evidence relied upon in the case underlying the earlier decision, may also need to be considered in order to assess relevant similarities or differences between the facts underlying the two cases.

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- 32.3 For these reasons, the submission that the specific factual and technical situation underlying a particular earlier decision is similar to the factual and technical situation underlying the case pending before the board, such that the way in which the EPC was applied in that earlier decision should be followed or taken into account in applying the EPC to the pending case, includes a new allegation of fact and is not only an interpretation of the law.
- 32.4 Since, in the present case, this new allegation of fact was made for the first time at the oral proceedings, it constitutes an amendment to the respondent's appeal case. In the absence of any exceptional circumstances, the board decided not to admit this amendment (Article 13(2) RPBA 2020).

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Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



M. Schalow

M. O. Müller

Decision electronically authenticated