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Datasheet for the decision of 9 May 2023

Case Number: T 3012/18 - 3.3.02

Application Number: 10767543.1

Publication Number: 2421876

C07F9/145, C07F9/146, IPC:

C07F9/6574

Language of the proceedings: ΕN

Title of invention:

HIGHLY SELECTIVE PROCESS FOR PRODUCING ORGANODIPHOSPHITES

Patent Proprietor:

Invista Technologies S.à.r.l.

Opponent:

Evonik Operations GmbH

Headword:

Relevant legal provisions:

EPC Art. 83 RPBA 2020 Art. 13(1), 13(2)

Keyword:

Amendment to appeal case Sufficiency of disclosure

Decisions cited:

T 0197/10, T 0169/20

Catchword:



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 3012/18 - 3.3.02

DECISION
of Technical Board of Appeal 3.3.02
of 9 May 2023

Appellant: Evonik Operations GmbH

(Opponent) Rellinghauserstrasse 1-11

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Representative: Eisenführ Speiser

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 22 November 2018 rejecting the opposition filed against European patent No. 2421876 pursuant to Article

101(2) EPC.

Composition of the Board:

Chairman M. O. Müller Members: P. O'Sullivan

A. Bacchin

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Summary of Facts and Submissions

- The appeal of the opponent (hereinafter appellant) lies from the decision of the opposition division according to which the opposition against European patent 2 421 876 was rejected.
- II. In preparation for oral proceedings, scheduled according to the appellant's request, the board issued a communication pursuant to Article 15(1) RPBA 2020.
- III. Oral proceedings by videoconference before the board took place as scheduled on 9 May 2023 in the presence of both parties.

IV. Requests

The appellant requested that the contested decision be set aside, and that the patent be revoked in its entirety.

The respondent requested dismissal of the appeal, implying maintenance of the patent as granted.

The respondent also requested that its new interpretation of the first mole ratio in granted claim 1, submitted at oral proceedings before the board, be admitted into the appeal proceedings and decided upon by the board.

Alternatively it requested that said new interpretation be admitted into the appeal proceedings and the case be remitted to the opposition division for further prosecution. - 2 -T 3012/18

- V. For the text of claim 1 of the main request, reference is made to the reasons for the decision, below.
- VI. For the parties' submissions relevant to the present decision, reference is made to the reasons for the decision provided below.

Reasons for the Decision

Sole main request (patent as granted)

- 1. Granted claim 1 reads as follows:
 - 1. A method for producing a diphosphite of Structure I,

$$R^{1}-O$$
 $P-O-Q-O-P$ $O-R^{1}$ $R^{2}-O$ $O-R^{2}$

comprising the steps of:

contacting a phosphorochloridite of Structure II,

with a bisaryl compound selected from the group consisting of Structure III, Structure IV, and Structure V,

Structure III Structure IV

Structure V

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and a tertiary organic amine, comprising a basic nitrogen atom or a plurality of nitrogen atoms, to produce a reaction mixture comprising a diphosphite of Structure I and at least one phosphorus-containing coproduct in the reaction mixture selected from the group consisting of $P(OR^1)(OR^2)_2$, $P(OR^1)_2(OR^2)$, $P(OR^1)_3$, $P(OR^2)_3$, a compound of Structure VIa, and a compound of Structure VIb,



wherein,

the contacting step is carried out by at least one contacting method selected from the group consisting of,

- (i) feeding the bisaryl compound to a mixture of phosphorochloridite and tertiary organic amine, and
- (ii) feeding the bisaryl compound and the tertiary organic amine separately or as a mixture to the phosphorochloridite;

and the contacting step is carried out by controlling the feeding such that a first mole ratio is at least 2.0 during all stages of the contacting step, wherein the first mole ratio is defined as moles of phosphorochloridite in the reaction mixture divided by moles of bisaryl compound fed to the reaction mixture,

and the contacting step is carried out by controlling the feeding such that a second mole ratio is at least 1.0 during all stages of the contacting step, wherein the second mole ratio is defined as moles of basic - 4 - T 3012/18

nitrogen atoms from the tertiary organic amine fed to the reaction mixture divided by moles of phosphorochloridite in the reaction mixture; and

wherein the bisaryl compound, the tertiary organic amine, or a combination of the bisaryl compound and the tertiary organic amine, contacting the phosphorochloridite further comprises a total of from 0 ppm to 300 ppm by weight of water; wherein the method is characterized in that the contacting is controlled by at least one control method selected from the group consisting of,

- (iii) controlling the feeding such that the first mole ratio is from 2.1 to 2.7 during the stage of the contacting wherein phosphorochloridite conversion is from 90% and 100%; and
- (iv) controlling the feeding such that a phosphorochloridite concentration is greater than or equal to 0.02 moles per liter in the reaction mixture during the stage of the contacting wherein phosphorochloridite conversion is from 0% to 90%;

wherein,

less than 30% of the total phosphorus in the reaction mixture is in the form of the at least one phosphorus-containing co-product,

wherein in Structures I to V and the at least one phosphorus-containing co-product,

 R^1 and R^2 are the same or different, substituted or unsubstituted, monovalent aryl groups; each of R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , and R^{12} is independently selected from the group consisting of hydrogen, alkyl, aryl, heteroaryl, aryloxy, heteroaryloxy, alkyloxy, alkoxyalkyl, acetal, carboaryloxy, carboalkoxy, arylcarbonyl, alkylcarbonyl, oxazole, amine, amide,

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nitrile, mercaptyl, and halogenyl groups; and O-Q-O is a dianion of the bisaryl."

- 2. The respondent's new interpretation of claim 1 admittance
- 2.1 Background
- 2.1.1 Granted claim 1, in summary, concerns a method for preparing a bidentate phosphite of structure I, above, by contacting a phosphorochloridite of structure II with a bisaryl compound, in the presence of a tertiary organic amine
- 2.1.2 According to claim 1, the contacting step is carried out *inter alia* by controlling the feeding such that a first mole ratio is at least 2.0 during all stages of the contacting step, wherein the first mole ratio is defined as moles of phosphorochloridite in the reaction mixture divided by moles of bisaryl compound fed to the reaction mixture. A second mole ratio is also defined in the claim (patent, page 59, lines 7-13).
- 2.1.3 In written appeal proceedings, the interpretation of the first mole ratio, in particular in relation to the expression "moles of phosphorochloridite in the reaction mixture", was a matter of dispute between the parties. In its communication pursuant to Article 15(1) RPBA (point 2.1), the board noted that the interpretation of this expression was relevant in particular to the issue of sufficiency of disclosure.
- 2.1.4 As summarised by the board (point 2.2 of the communication), with its grounds of appeal the appellant argued that said expression referred to the total moles of phosphorochloridite at any given point

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in time during the contacting step, i.e. it was a
dynamic amount which changed (reduced) with the
progression of the reaction.

- 2.1.5 In its reply to the grounds of appeal, the respondent on the other hand argued that said expression was to be understood as referring to the total number of moles of phosphorochloridite starting material **initially charged** to the reactor, i.e. it was a constant which did not change. The respondent submitted detailed arguments supporting its position (reply to the statement of grounds, in particular points 8.1 10.2).
- 2.1.6 In contrast, the interpretation of the expression "moles of bisaryl compound fed to the reaction mixture" in the first mole ratio was not a matter of dispute in written appeal proceedings.
- 2.1.7 Specifically, according to the appellant, it was clear to the skilled person that this expression referred to the total amount of bisaryl which had been fed to the reaction mixture up to any given point in the contacting step, i.e. it was also a dynamic amount which increased as the contacting step proceeded (e.g. statement of grounds of appeal, paragraph bridging pages 12 and 13).
- 2.1.8 This interpretation was not challenged by the respondent with its reply, in which it was merely stated that the amount of bisaryl compound changes in the calculation of the first mole ratio (point 8.3, final sentence).
- 2.1.9 In its communication, the board agreed with the interpretation of the first mole ratio provided by the

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- appellant, and provided detailed reasons supporting its argumentation (points 2.3 2.11).
- 2.1.10 Furthermore, in view of this interpretation and in line with the appellant's submissions, the board concluded that the claimed subject-matter was not sufficiently disclosed, also providing detailed arguments in this regard (points 4.1 -4.6).
- 2.1.11 The respondent did not reply to the board's communication in advance of oral proceedings.
- 2.2 Oral proceedings before the board
- 2.2.1 At oral proceedings before the board, the respondent was requested to provide its submissions concerning the interpretation of the first mole ratio in claim 1. It submitted that in contrast to the view set out in its reply that it now agreed with the board's interpretation of the expression "moles of phosphorochloridite in the reaction mixture" set out in the communication pursuant to Article 15(1) RPBA, namely that it referred to a dynamic amount which changed (decreased) with the progression of the reaction.
- 2.2.2 Crucially however, the respondent submitted that the expression "moles of bisaryl compound fed to the reaction mixture" in the first mole ratio of claim 1 was to be interpreted as referring to the amount of bisaryl compound that had not yet reacted in the reaction mixture, i.e. the amount of bisaryl compound present in the reaction mixture and available for reaction. Hence said expression did not refer to the cumulative amount of bisaryl compound added to the reaction at a given time during the contacting step, as

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set out by the appellant, and by the board in its communication.

- 2.2.3 Subsequent to the respondent's submissions in this regard, the board raised the issue of admittance of the respondent's new interpretation of claim 1 into the proceedings pursuant to Article 13(1) and 13(2) RPBA 2020.
- 2.2.4 The respondent requested that its new interpretation of claim 1 be admitted into the appeal proceedings.
- 2.3 The board's view Article 13(2) RPBA 2020
- 2.3.1 According to Article 13(2) RPBA 2020, any amendment to a party's appeal case made after notification of a summons to oral proceedings shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.
- 2.3.2 The respondent's position on the interpretation of the first mole ratio submitted at oral proceedings is completely new. Specifically, in relation to the expression "moles of phosphorochloridite in the reaction mixture", it represents a complete reversal of its position set out in its reply to the statement of grounds of appeal, namely to now confirm that the appellant's (and the board's) interpretation was correct. Furthermore, the respondent did not dispute that its proposed interpretation of the expression "moles of bisaryl compound fed to the reaction mixture" was submitted for the first time at oral proceedings before the board, in response to the appellant's interpretation of this feature, which was presented

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already with the statement of grounds of appeal (see point 2.1.7 above).

- 2.3.3 Hence, even though the respondent's interpretation of "moles of phosphorochloridite in the reaction mixture" is now aligned with the appellant's and the board's view, the overall interpretation of the first mole ratio is completely new.
- 2.3.4 Consequently, this new interpretation is a new fact submitted for the first time at oral proceedings, and represents an amendment of the respondent's case compared to its position set out in the reply to the grounds of appeal. Indeed, this was confirmed by the fact that during oral proceedings, the respondent was prepared to submit new calculations based on this new interpretation of claim 1 and did not dispute that this would amount to a new fact. Hence, the admittance of this new fact is subject to the requirements of Article 13(2) RPBA.
- 2.3.5 As set out above, the interpretation of the first mole ratio adopted by the board in its communication pursuant to Article 15(1) RPBA was the same as that proposed by the appellant with the statement of grounds of appeal. Hence, this interpretation was not new. Consequently, the admittance of the respondent's new interpretation at oral proceedings cannot be justified by any new objections or unexpected developments raised for the first time with the board's communication. Furthermore, no such new objection or unexpected development was identified by the respondent. Hence, no exceptional circumstances in the sense of Article 13(2) RPBA 2020 are present.

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- 2.3.6 The respondent argued that exceptional circumstances within the meaning of Article 13(2) RPBA arose in relation to the submission of its interpretation.
- 2.3.7 First, it submitted that in written appeal proceedings, in relation to the first mole ratio, both parties had focused on the interpretation of the expression "moles of phosphorochloridite in the reaction mixture".

 Regrettably, however, neither party had focused the board's attention on the interpretation of the expression "moles of bisaryl compound fed to the reaction mixture" in relation to the first mole ratio, and hence written appeal proceedings had been conducted on the wrong battleground.
- 2.3.8 As stated above, the appellant's interpretation of the first mole ratio was clearly set out in its statement of grounds of appeal. In its reply, the respondent argued that the appellant's interpretation of "moles of phosphorochloridite in the reaction mixture" was incorrect, and did not disagree nor focus on the appellant's understanding of "moles of bisaryl compound fed to the reaction mixture". If however, as the respondent argued at oral proceedings, the focus of the written appeal proceedings should have been elsewhere, then the board can see no cogent reason why the respondent could not have duly re-evaluated and refocused the subject-matter of the proceedings as it deemed fit, in a timely manner, namely with the reply to the grounds of appeal.
- 2.3.9 Second, the respondent submitted that until shortly before oral proceedings before the board, the inventor had been unavailable for consultation. It was only after this consultation that the respondent realised that the board's interpretation of the expression

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"moles of phosphorochloridite in the reaction mixture" was correct, which duly required a re-evaluation of the meaning of the expression "moles of bisaryl compound fed to the reaction mixture".

- 2.3.10 In the board's view however, the alleged non-availability of the inventor, even if accepted as true despite the fact that by the date of oral proceedings, appeal proceedings had been pending for four years, is not relevant to admittance under
 Article 13(2) RPBA. Specifically, the exceptional circumstances referred to under this provision should relate to the proceedings, and not to external events or circumstances.
- 2.3.11 In view of these considerations, the board decided not to admit the respondent's new claim interpretation into the appeal proceedings pursuant to Article 13(2) RPBA.
- 2.4 The board notes that even if it had accepted the respondent's submissions that exceptional circumstances were present justifying admittance of the new claim interpretation and the line of argument based thereon, admittance would also not have been possible in view of the criteria under Article 13(1) RPBA, which may be taken into account in the application of Article 13(2) RPBA.
- 2.4.1 According to this provision, any amendment to a party's appeal case after it has filed its reply is subject to the party's justification for its amendment and may be admitted only at the discretion of the board. The board shall exercise its discretion in view of, inter alia, the current state of the proceedings, the suitability of the amendment to resolve the issues which were admissibly raised by another party in the appeal

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proceedings or which were raised by the board, and whether the amendment is detrimental to procedural economy.

- 2.4.2 Regarding the current state of the proceedings, it is evident as mentioned above that the respondent's new interpretation was submitted at the very latest stage of appeal proceedings, namely at the oral proceedings before the board.
- 2.4.3 This submission at oral proceedings can be distinguished from a situation in which it were submitted in writing, even assuming both situations were subject to the provisions of Article 13(1) RPBA. Specifically, at oral proceedings, both the board and the appellant are faced with the need to understand said interpretation (and accompanying supporting argumentation) in a short period of time. Furthermore, the appellant must be provided with sufficient opportunity to adequately react thereto.
- 2.4.4 In its introductory remarks when presenting its new interpretation of the expression "moles of bisaryl compound fed to the reaction mixture" at oral proceedings, the respondent indicated its intention to demonstrate by calculation with reference of example 5 of the patent, that the first mole ratio in claim 1 was satisfied using its new interpretation. At this time the board also raised the question of how the amount of bisaryl compound that had not yet reacted in the reaction mixture would be determined by the skilled person.
- 2.4.5 These issues are anything but straightforward, and neither the board nor the appellant - for whom the right to be heard pursuant to Article 113 EPC must be

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respected - were prepared to deal with them at short notice during oral proceedings.

- 2.4.6 Consequently, in view of the amendment having been submitted at the very latest stage of appeal proceedings, and in the interest of procedural economy, the respondent's new claim interpretation cannot be admitted into appeal proceedings pursuant to Article 13(1) RPBA either.
- 2.4.7 As stated above, the respondent's interpretation should have been submitted at the beginning of appeal proceedings, namely with the reply to the grounds of appeal, and not later in the proceedings, let alone at the very last stage of appeal proceedings, namely during oral proceedings before the board. This is also consistent with Article 12(3) RPBA 2020 (which in its content is identical to Article 12(2) RPBA 2007), which stipulates that the reply to the statement of grounds of appeal shall contain a party's complete appeal case.
- 2.4.8 In view of the foregoing, it also follows that the respondent's request that its new interpretation of the first mole ratio in granted claim 1 be admitted into the appeal proceedings and that the case be remitted to the opposition division for further prosecution, is moot.
- 3. Claim interpretation
- 3.1 Introduction and context
- 3.1.1 In view of the board's decision not to admit the respondent's new interpretation of claim 1 as set out above, during oral proceedings, the respondent's claim

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interpretation as put forward in the written appeal proceedings remains the interpretation under consideration.

- 3.1.2 As set out above, contested claim 1 in summary concerns a method to prepare a bidentate phosphite of structure I, above, by reacting a phosphorochloridite of structure II with a bisaryl compound, in the presence of a tertiary organic amine, and defines inter alia a first mole ratio as detailed above.
- 3.1.3 According to the respondent in the reply to the grounds of appeal, and as concluded in the contested decision (point 14), the expression "moles of phosphorochloridite in the reaction mixture" was to be interpreted as referring to the total number of moles of phosphorochloridite starting material initially charged to the reactor.
- 3.1.4 The board disagrees. Specifically, claim 1 details the steps of contacting a phosphorochloridite of structure II with a bisaryl compound chosen from three specific structures and a tertiary organic amine, to produce a reaction mixture comprising inter alia a diphosphite of structure I, the desired product of the method. Hence the "reaction mixture" of claim 1 comprises the product diphosphite (claim 1, page 58 of the patent, lines 15 55). The method also requires that the contacting step is carried out by "controlling the feeding" such that a specific first mole ratio is respected "during all stages of the contacting step" (patent, page 59, lines 7-13).
- 3.1.5 In the definition of the ratios in claim 1, the reference to "the reaction mixture" has antecedent basis in "a reaction mixture" mentioned earlier in the

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claim. Therefore, each instance of the term "reaction mixture" would be understood by the skilled reader of the claim as one and the same. Since the reaction mixture must comprise the product as set out above, already for this reason, the wording "moles of phosphorochoridite in the reaction mixture" cannot refer to the starting amount of phosphorochoridite as argued by the respondent, since the starting amount cannot logically comprise the product.

- Furthermore, claim 1 stipulates that the recited ratios 3.1.6 are to be maintained "during all stages of the contacting step". Therefore, as stated by the appellant, the skilled person would understand that claim 1 requires, at any given stage, characterisation of the reaction mixture and the quantitative determination of the moles of phosphorochoridite contained therein. If a particular ratio, according to the claim, is to be determined "during all stages of the contacting step", then interpreting this ratio to include a value, such as in the present case the initial concentration of phosphorochoridite, which is independent of the stages of the contacting step, lies in direct contradiction to the explicit wording of the claim.
- 3.1.7 As stated by the appellant, this interpretation is also supported by a further characterising feature of the claim, that the contacting is controlled by at least one control method selected from the group including feature (iv) of contested claim 1 (patent, page 59, lines 22-24), namely:
 - "(iv) controlling the feeding such that a phosphorochloridite concentration is greater than or equal to 0.02 moles per liter in the reaction mixture

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during the stage of the contacting wherein phosphorochloridite conversion is from 0% to 90%".

- 3.1.8 Here, the "phosphorochloridite concentration" is also related to a specific stage of the contacting and is intended to be measured during this specific stage (when the conversion is from 0% to 90%). Hence, in the context of this feature, "reaction mixture" refers to the mixture at any specific stage of the contacting from 0-90% conversion, and is therefore a dynamic amount.
- 3.1.9 The board also agrees with the appellant that contested claim 1 is unambiguous and technically meaningful insofar as the interpretation of the wording "moles of phosphorochoridite in the reaction mixture" is concerned, and that at least for this reason there is no need to consult the description of the patent for the purpose of its interpretation (see T 197/10, Reasons 2.3 and T 169/20, Reasons 1.4).
- 3.1.10 Nevertheless, even if the skilled person were to consult the description, as argued by the respondent, the board is of the view that an interpretation of the wording "moles of phosphorochloridite in the reaction mixture" in line with that proposed by the respondent, would still not arise.
- 3.1.11 Specifically, claim 1 also stipulates a second mole ratio defined as "moles of basic nitrogen atoms from the tertiary organic amine fed to the reaction mixture" divided by "moles of phosphorochloridite in the reaction mixture". Hence any indication in the description in relation to the interpretation of the expression "moles of phosphorochloridite in the reaction mixture" for the second mole ratio would also

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be relevant to the interpretation of this expression in the first mole ratio.

- 3.1.12 In this context, the respondent argued that on reading examples 17-25 of the patent (paragraphs [0086] -[0090], reported in table 14 (page 44)), the skilled person would have understood that the fourth column of table 14 headed "NEt3 equivalents" referred to moles of triethylamine "per total mole of the phosphorochloridite undergoing the contacting" (see table 14, footnote), i.e. the initial amount of phosphorochloridite charged to the reactor. When the number of equivalents of triethylamine fell below 1.0, as it did for example 17 and 24, the amount of undesirable cyclophosphite increased (table 14, right hand column). Thus, the skilled person would have understood that the ratio in the fourth column of table 14 is the second mole ratio defined in claim 1 of the patent. Further support for this interpretation was to be found in paragraph [0089], and tables 6, 7, 8, 11, 15, 18, 19 and 20. Hence, the expression "moles of phosphorochloridite in the reaction mixture" was to be understood as the initial amount of phosphorochloridite charged to the reactor, i.e. as a constant.
- 3.1.13 The board disagrees. The description of the patent does not support the respondent's interpretation. In particular, none of the examples even refer to a first or second mole ratio as defined in contested claim 1. There would therefore be no reason for the skilled person to understand the amounts provided in the fourth column of table 14 to relate to the numerator in the second mole ratio recited in claim 1. Furthermore, even though as stated by the respondent, the initial total amount of phosphorochloridite charged to the reaction vessel is provided in certain examples, there is no

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disclosure that this amount is synonymous with the "moles of phosphorochloridite in the reaction mixture" required in relation to said first and second ratios. As set out above, such an interpretation would go against the explicit wording of claim 1.

- 3.1.14 Finally, the board notes that the respondent's interpretation is in contradiction with paragraph [0036] of the patent which foresees that the contacting methods (i) and (ii) of claim 1 may also be carried out in a continuous mode, in which case it does not make any sense to refer to a specific initial number of moles of the phosphorochloridite charged to the reaction vessel.
- 3.1.15 Hence, the wording "moles of phosphorochloridite in the reaction mixture" in contested claim 1, is understood to refer dynamically to the total moles of phosphorochloridite present at any given point in time in the reaction mixture during the contacting step.
- 3.1.16 With regard to the expression "moles of bisaryl compound fed to the reaction mixture", the board also maintains the interpretation as originally proposed by the appellant in the grounds of appeal, namely that it refers to the total amount of bisaryl which had been fed to the reaction mixture up to any given point in the contacting step, i.e. it was also a dynamic amount which increased as the contacting step proceeded. As stated above, the appellant's interpretation was not challenged by the respondent in its reply, and it was also accepted by the board in the communication pursuant to Article 15(1) RPBA (this can be derived for example from point 4.4 thereof).

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- 4. Sufficiency of disclosure Article 100(b) EPC
- The appellant submitted that the subject-matter of contested claim 1 was not sufficiently disclosed. In particular, the appellant argued that there were no examples in the patent which taught the skilled person how to implement the claimed method. Claim 1 was not sufficiently disclosed across its entire scope, but also in view of specific embodiments, such as inter alia in the implementation of the characterising feature of claim 1 whereby the contacting is controlled by control method (iii) (claim 1, page 59, lines 20-21).
- 4.2 The board agrees. The examples of the patent provide no guidance to the skilled person on how to carry out the claimed method. In particular, no indication is provided how the requirements for the first and second mole ratio are to be met during all stages of the contacting step.
- 4.3 Furthermore, it is not possible to carry out the characterising feature of claim 1 whereby the contacting is controlled by control method (iii), namely
 - "controlling the feeding such that the first mole ratio is from 2.1 to 2.7 during the stage of the contacting wherein phosphorochloridite conversion is from 90% and 100%"
- As stated by the appellant, when the phosphorochloridite conversion is above 90%, there is very little phosphorochloridite remaining in the reaction mixture, while the amount of "fed" bisaryl

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compound is sufficient to have converted more than 90% of the initial phosphorochloridite to the product.

- 4.5 Hence, the first mole ratio, defined as the amount of phosphorochloridite in the reaction mixture divided by the moles of bisaryl compound added, cannot be within the claimed range of from 2.1 to 2.7. This is illustrated in the figure on page 23 of the statement of grounds of appeal. Therefore, the method of claim 1 cannot be carried out by the skilled person.
- 4.6 The board acknowledges that as a rule in *inter partes* proceedings the burden of proof to prove insufficiency of disclosure lies with the opponent (here appellant) first. However, the board agrees with the appellant that, when the patent does not give any information at all as to how a feature of the invention can be put into practice, such as in the present case, only a weak presumption exists that the invention is sufficiently disclosed.
- 4.7 In view of the above considerations, which were all put forward by the appellant, and taking into account this very weak presumption, the appellant has discharged its initial burden of proof.
- 4.8 Finally, the respondent stated at oral proceedings that if the expression "moles of bisaryl compound fed to the reaction mixture" in the first mole ratio were to be interpreted as cumulative in line with the boards preliminary opinion set out in the communication pursuant to Article 15(1) RPBA 2020, then claim 1 did not make sense. This statement serves to confirm the conclusions of the board as set out above.

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- 4.9 Consequently, the ground for opposition under Article 100(b) EPC prejudices the maintenance of the patent as granted.
- 5. The sole main request (patent as granted) is not allowable.

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is revoked.

The Registrar:

The Chairman:



N. Maslin M. O. Müller

Decision electronically authenticated