

**Internal distribution code:**

- (A) [ ] Publication in OJ  
(B) [X] To Chairmen and Members  
(C) [ ] To Chairmen  
(D) [ ] No distribution

**Datasheet for the decision  
of 19 August 2010**

**Case Number:** T 1544/07 - 3.3.10

**Application Number:** 01310765.1

**Publication Number:** 1231206

**IPC:** C07C 409/32

**Language of the proceedings:** EN

**Title of invention:**

Stabilized organic peroxidicarbonate compositions

**Patentee:**

Arkema Inc.

**Opponent:**

Degussa Initiators GmbH & Co. KG  
Akzo Nobel N.V.

**Headword:**

Stabilised peroxidicarbonate/ARKEMA

**Relevant legal provisions:**

EPC Art. 56, 123(3)

**Relevant legal provisions (EPC 1973):**

-

**Keyword:**

"*Reformatio in peius* - not examined by the Board of its own motion"

"Extension of protection conferred (no)"

"Inventive step (no) - obvious alternative"

**Decisions cited:**

G 0009/92, G 0004/93, G 0001/99, T 0022/81, T 0049/89,  
T 0939/92, T 0468/97, T 0714/98, T 0724/99, T 2017/07

**Headnote:**

If the opponent and sole appellant deliberately refrains from invoking the prohibition of *reformatio in peius* against a claim request submitted by the Respondent/Patentee which extends the scope beyond that of the claims as maintained by the first instance, the Board does not see any reason why it should apply the principle of the prohibition of *reformatio in peius* of its own motion. Following the principle of party disposition any right protecting an appellant against an outcome that puts it in a worse position than if it had not appealed, may be waived (*volenti non fit iniuria*).



Case Number: T 1544/07 - 3.3.10

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.10  
of 19 August 2010

**Party as of right:** Degussa Initiators GmbH & Co. KG  
(Opponent I) Postfach  
D-82047 Pullach (DE)

**Representative:** Dey, Michael  
Weickmann & Weickmann  
Patentanwälte  
Richard-Strauss-Strasse 80  
D-81679 München (DE)

**Appellant:** Akzo Nobel N.V.  
(Opponent II) Velperweg 76  
NL-6824 BM Arnhem (NL)

**Representative:** Alferink, Petrus J.T.  
Akzo Nobel N.V.  
Intellectual Property Dept.  
P.O. Box 9300  
NL-6800 SB Arnhem (NL)

**Respondent:** Arkema Inc.  
(Patent Proprietor) 2000 Market Street  
Philadelphia, PA 19103-3222 (US)

**Representative:** Stoner, Gerard Patrick  
Mewburn Ellis LLP  
33 Gutter Lane  
London EC2V 8AS (GB)

**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
12 July 2007 concerning maintenance of European  
patent No. 1231206 in amended form.

**Composition of the Board:**

**Chairman:** R. Freimuth  
**Members:** J. Mercey  
F. Blumer

## Summary of Facts and Submissions

I. The Appellant (Opponent II) lodged an appeal on 12 September 2007 against the interlocutory decision of the Opposition Division posted on 12 July 2007 which found that European patent No. 1 231 206 in amended form met the requirements of the EPC.

II. Notice of Opposition had been filed by the Appellant and the party as of right (Opponent I) requesting revocation of the patent as granted in its entirety on the grounds of lack of novelty and inventive step (Article 100(a) EPC), insufficient disclosure (Article 100(b) EPC), and of extending the subject-matter of the patent in suit beyond the content of the application as filed (Article 100(c) EPC). *Inter alia* the following documents were submitted in opposition proceedings:

(8) US-A-5 541 151 and

(10) WO-A-98 33770.

III. The decision under appeal was based on the patent as amended according to the then pending main request, independent claim 8 of said request reading as follows:

"A process for the preparation of a dialkyl peroxydicarbonate composition wherein at least one alkyl chloroformate is reacted with aqueous hydrogen peroxide in a reaction mixture containing aqueous base, characterised by adding from 10% to 90% by weight, based on the dialkylperoxydicarbonate, of compound of Structure I:



wherein R<sup>1</sup> and R<sup>2</sup> are the same or different and are selected from the group consisting of alkyl of 4 to 20 carbons, cycloalkyl of 6 to 10 carbons, aryl of 6 to 10 carbons, aralkyl of 7 to 11 carbons, and combinations thereof, and wherein the butenedioic moiety is optionally 2-alkyl-substituted, to said reaction mixture prior to initiation of, at the time of initiation of, or at any time during the reaction between said alkylchloroformate and said aqueous hydrogen peroxide, or to the dialkyl peroxydicarbonate so formed prior to or during its purification."

IV. The Opposition Division held that the claims of the then pending main request satisfied the requirements of Article 123(2) and (3) EPC, that the ground for opposition pursuant to Article 100(c) EPC was not fulfilled, that the invention was sufficiently disclosed, novel, and involved an inventive step, document (8) being considered to represent the closest prior art for the independent process claim 8.

V. At the oral proceedings before the Board, held on 19 August 2010, the Respondent (Patent proprietor) filed a main request and an auxiliary request, these two requests superseding all previous requests. Claim 1 of the main request differed from claim 8 as maintained by the Opposition Division in that, in response to an objection of the Appellant, the reference point for the amount of compound of structure I of 10% to 90% by weight, namely "based on the dialkylperoxydicarbonate", had been deleted, as had a particular step of the

reaction when said compound could be added, namely "during" its purification. Claim 1 of the auxiliary request differed from claim 1 of the main request in that it was additionally specified that when the compound of structure I was added prior to purification, it was added "at the end of the reaction between the dialkyl chloroformate and the aqueous hydrogen-peroxide prior to separation of crude dialkyl peroxydicarbonate from the reaction mixture".

- VI. The Appellant had no objections under Article 100(c) or Article 123(2) EPC to the amendments made to claim 1 of either the main or the auxiliary request, but questioned whether the deletion *vis-à-vis* claim 9 as granted of hydrogen as a possibility for R<sup>1</sup> and/or R<sup>2</sup> in the compound of structure I led to an extension of the protection conferred by the patent and thus offended against Article 123(3) EPC, citing decision T 2017/07 (not published in OJ EPO) in this respect. More particularly, in view of its open definition, claim 1 of the main and auxiliary requests embraced processes in which compounds of structure I wherein R<sup>1</sup> and/or R<sup>2</sup> were hydrogen may be added in any amount, whereas previously this amount was restricted to 10 to 90% by weight.

The Appellant further argued that the subject-matter of the main request was not inventive starting from document (8) as closest prior art, which described the preparation of dialkyl peroxydicarbonates by the reaction of alkyl chloroformate with aqueous hydrogen peroxide and sodium or potassium hydroxide, followed by washing, separation and drying, whereby ethylenically unsaturated nitriles or acetylenes might be added as

stabiliser at any of the steps of the process, preferably at the end of the reaction and before the first separation step. In Table 1 in column 14, the thermal stabilisation of diisopropyl peroxydicarbonate with diethyl maleate was disclosed. Since the problem was merely the provision of an alternative process for stabilising a dialkyl peroxydicarbonate during its preparation, the solution, which was characterised by adding a maleate or fumarate of structure I, was obvious in view of the teaching of document (10), which taught *inter alia* dibutyl maleate and dibutyl fumarate as phlegmatisers for peroxydicarbonates.

With regard to the additional feature in the auxiliary request, the Appellant submitted that adding the stabiliser at this step of the reaction was already taught by the closest prior art document (10), more particularly as the preferred embodiment therein.

VII. The Respondent submitted that the claims of both requests fulfilled the requirements of Article 123(2) and (3) EPC. It further argued that the subject-matter of the main request was inventive and also started from document (8) as closest prior art. In the light of document (8), the problem to be solved by the patent in suit was the provision of an alternative process for preparing dialkyl peroxydicarbonate compositions in which the product was stabilised during the process. The solution comprised the maleates and fumarates of structure I. Document (8) taught only that a composition comprising diethyl maleate and diisopropyl peroxydicarbonate was more stable than diisopropyl peroxydicarbonate alone, but did not specifically teach the stabilisation of such a dialkyl peroxydicarbonate

with diethyl maleate during its preparation, document (8) teaching only particular ethylenically unsaturated nitriles and acetylenes for this latter purpose. Document (10), although being concerned with the stabilisation of peroxide compounds in general and referring in this respect to peroxydicarbonates, was, however, primarily concerned with stabilising ketone peroxide compositions and did not even specifically refer to dialkyl peroxydicarbonates, let alone that these could be stabilised during their preparation from alkyl chloroformates in an aqueous alkaline medium. Furthermore, dibutyl fumarate and dibutyl maleate were only two phlegmatisers in a list of phlegmatisers extending over more than three pages of document (10), the skilled person being provided with no guidance to select these particular esters, let alone in combination with the stabilisation of a dialkyl peroxydicarbonate.

With regard to the auxiliary request, claim 1 thereof had been amended *vis-à-vis* claim 1 of the main request in that one of the possible steps of the process at which the stabiliser of structure I could be added, namely prior to its purification, had been defined more precisely such that the process was now restricted to embodiments wherein the stabiliser was added when aqueous alkali was still present in the mixture, the diethyl maleate of document (8) and the dibutyl fumarate and dibutyl maleate of document (10) being taught for the stabilisation of peroxydicarbonates *per se* only.

VIII. The Party as of right did not file any submissions.



IX. The Respondent requested that the decision under appeal be set aside and the patent be maintained on the basis of the main request or, subsidiarily, on the basis of the auxiliary request, both requests filed during oral proceedings before the Board.

The Appellant requested that the decision under appeal be set aside and the patent be revoked. The Party as of right filed no requests.

X. Oral proceedings were held in the absence of the Party as of right, who, after having been duly summoned, did not attend. At the end of the oral proceedings, the decision of the Board was announced.

## **Reasons for the Decision**

1. The appeal is admissible.

### *Main request*

2. *Reformatio in peius*

2.1 The process according to claim 8 as maintained by the Opposition Division was characterized, *inter alia*, by the feature "adding from 10% to 90% by weight, based on the dialkylperoxydicarbonate, of compound of Structure I". Claim 1 of both the main request and the auxiliary request, which are based on claim 8 as maintained by the Opposition Division, merely specify the feature "adding from 10% to 90 % by weight of compound of Structure I" (cf. point V above). The deletion of the reference point for the weight range of

the compound of structure I of from 10% to 90%, namely "based on the dialkylperoxydicarbonate", results in an unclarity of that feature, i.e. in the reference point to be used. The use of a reference point other than the weight of the dialkylperoxydicarbonate (see point 6.4 below) results in the claim now covering a process employing amounts of a compound of structure I not covered by claim 8 as maintained by the Opposition Division. The deletion of the reference point therefore results in an extension of the independent process claim *vis-à-vis* that as maintained by the Opposition Division.

- 2.2 As a result, the deletion of the reference point for the weight range in claim 8 as maintained by the Opposition Division and the resulting extension of its scope means that the patent covers embodiments which were not covered by the patent as maintained by the Opposition Division, and, consequently, that the Appellant is put in a worse position than if it had not appealed (*reformatio in peius*; see, e.g. T 724/99, points 3.2 and 3.3 of the reasons, not published in OJ EPO). In principle, an amended claim, which would put the opponent and sole appellant in a worse situation than if it had not appealed, must be rejected (cf. G 1/99, OJ EPO 2001, 381). If the opponent is the sole appellant against an interlocutory decision maintaining a patent in amended form, the patent proprietor is primarily restricted during the appeal proceedings to defending the patent in the form in which it was maintained by the opposition division (cf. G 4/93 and G 9/92, OJ EPO 1994, 875, point 16 of the reasons).

- 2.3 The Respondent deleted the reference point from claim 8 as maintained by the Opposition Division in reaction to an objection raised by the Appellant. The Board considers that said amendment arising from the appeal proceedings is necessary and appropriate and thus does not see any reason to question the admissibility of the amendment for procedural reasons.
- 2.4 During oral proceedings, the Appellant was asked by the Board whether it objected to the deletion of the reference point as a possible *reformatio in peius*. In reply, the Appellant indicated that it had no objections thereto even if it would thereby put itself in a worse position than if it had not appealed. In this situation, the question arises whether the Board has to apply the prohibition of *reformatio in peius* of its own motion if the party affected deliberately refrains from making use of its right to invoke it. This question has not been addressed by the Enlarged Board of Appeal in the pertinent decisions (cf. G 9/92 and G 1/99, *loc. cit.*).
- 2.5 The EPC does not contain any provisions which stipulate that a decision terminating appeal proceedings must not place an appellant in a worse position than it was in as a result of the contested decision (cf. G 9/92, *loc. cit.*, point 7 of the reasons). If the opponent and sole appellant does not invoke the prohibition of *reformatio in peius* against a claim request submitted by the Respondent/Patentee which extends the scope beyond that of the claims as maintained by the first instance, the Board does not see any reason why it should apply the principle of the prohibition of *reformatio in peius* of its own motion. Following the principle of party

disposition governing the appeal proceedings, any right protecting the appellant against an outcome that puts it in a worse position than if it had not appealed, may be waived (*volenti non fit iniuria*).

2.6 For any amendment after grant of a patent, the Boards examine *ex officio* whether the amendment complies with the requirement of Article 123(3) EPC. If claims are extended in appeal proceedings *vis-à-vis* claims maintained in an interlocutory decision of the Opposition Division, the interests of third parties, i.e. the public, are not affected unless there is a violation of Article 123(3) EPC. However, the Board has found that the amended claim was within the limits of Article 123(3) EPC (see point 4 below). Therefore, the Board does not see the interests of the public to be affected, which could justify questioning *ex officio* the allowability of the claims extending beyond those maintained by the Opposition Division.

2.7 As the Appellant has not objected to the extension of the claims beyond the claims as maintained by the Opposition Division, the Board does not examine of its own motion whether the amendment constitutes a *reformatio in peius* (cf. T 714/98, point 2.2 of the reasons, not published in OJ EPO). Claim 1 is thus admitted into the proceedings.

3. *Amendments (Article 100(c) EPC and Article 123(2) EPC)*

The Appellant had no objections to claim 1 of the main request under either Article 100(c) or Article 123(2) EPC, nor does the Board see any reason to question its allowability under either of these articles of its own

motion. More particularly, the feature "wherein the butenedioic moiety is optionally 2-alkyl substituted" added before grant finds a basis at page 24, lines 2 and 3 of paragraph [0078] of the application as filed (Article 100(c) EPC). Furthermore, the deletion during the opposition/appeal proceedings of "hydrogen" as a possibility for R<sup>1</sup> and/or R<sup>2</sup> in the compound of structure I and of "during" purification as a possibility for the point in time of addition of the compound of structure I does not result in the generation of a fresh combination (Article 123(2) EPC).

4. *Amendments (Article 123(3) EPC)*

4.1 Article 123(3) EPC requires that the claims of a patent as granted may not be amended during opposition/appeal proceedings in such a way as to extend the protection conferred. In order to decide whether or not an amendment of the patent in suit satisfies that requirement, it is necessary to compare the protection conferred by the claims before amendment, i.e. as granted, with that of the claims after amendment.

4.2 In the present case, claim 1 is based on claim 9 as granted. It has been amended *vis-à-vis* claim 9 as granted by the deletion of hydrogen as a possibility for R<sup>1</sup> and/or R<sup>2</sup> in the compound of structure I. As a result thereof, in view of its open definition, claim 1 embraces a process in which compounds of structure I wherein R<sup>1</sup> and/or R<sup>2</sup> are hydrogen may be added in any amount, whereas in claim 9 as granted, this amount was apparently restricted to "10% to 90% by weight" (see T 2017/07, *loc.cit.*, point 2 of the reasons).

However, in order to determine the extension of protection conferred by a patent, **all** claims as granted have to be considered and not just any one particular claim (cf. T 49/89, point 3.3.2 of the reasons, not published in OJ EPO). In the present case, claim 1 as granted is directed to a composition containing 10% to 90% by weight, based on the weight of dialkyl peroxydicarbonate, of a compound of structure I wherein  $R^1$  and/or  $R^2$  are defined as in process claim 1 of the main request, i.e.  $R^1$  and/or  $R^2$  may not represent hydrogen. In view of the open definition of product claim 1 as granted, this composition may contain any amount of any other compound, for example, any amount of a compound of structure I wherein  $R^1$  and/or  $R^2$  are hydrogen. Since the protection conferred by a product claim covers any process for its preparation (cf. T 468/97, point 6.2 of the reasons, not published in OJ EPO), the protection conferred by product claim 1 as granted thus covers the preparation process according to claim 1 of the main request insofar as the product prepared, i.e. the composition, may contain any amount of a compound of structure I wherein  $R^1$  and/or  $R^2$  are hydrogen. Thus, the Board concludes that the scope of protection conferred by present claim 1 has not been broadened *vis-à-vis* that of claims 1 and 9 as granted, such that the requirements of Article 123(3) EPC are satisfied.

5. *Sufficiency of Disclosure (Article 100(b) EPC) and Novelty (Article 54 EPC)*

In the appealed decision, the invention was found to be sufficiently disclosed and novel (cf. point IV above). Since sufficiency of disclosure and novelty were no

longer contested during the appeal proceedings, the Board sees no reason to take a different view to the Opposition Division. Hence, it is unnecessary to go into more detail in this respect.

6. *Inventive step (Article 56 EPC)*

6.1 According to the established jurisprudence of the Boards of Appeal it is necessary, in order to assess inventive step, to establish the closest state of the art, to determine in the light thereof the technical problem which the invention addresses and successfully solves, and to examine the obviousness of the claimed solution to this problem in view of the state of the art. This "problem-solution approach" ensures assessing inventive step on an objective basis and avoids an *ex post facto* analysis. The closest prior art is normally a prior art document disclosing subject-matter aiming at the same objective as the claimed invention and having the most relevant technical features in common.

6.2 Claim 1 of the main request is directed to a process for the preparation of a dialkyl peroxydicarbonate composition by reaction of an alkyl chloroformate with aqueous hydrogen peroxide in the presence of aqueous base, wherein a maleate of fumarate diester is added to the reaction mixture. A similar process already belongs to the state of the art in that document (8) discloses a process for the preparation of dialkyl peroxydicarbonates by the reaction of alkyl chloroformate with aqueous hydrogen peroxide and sodium or potassium hydroxide, followed by washing, separation and drying, whereby ethylenically unsaturated nitriles or acetylenes may be added as stabiliser at any of the

steps of the process, preferably before the first separation step (see column 6, line 34 to column 7, line 20). Document (8) also discloses the addition of diethyl maleate as a stabiliser to diisopropyl peroxydicarbonate (see Example 1a and Table 1 at column 13, line 22 to column 14, line 11). Thus, the Board considers, in agreement with both parties and the Opposition Division, that in the present case the process bridging columns 6 and 7 of document (8) represents the closest state of the art and, hence, takes it as the starting point when assessing inventive step.

6.3 In view of this state of the art, the problem underlying the patent in suit, as submitted by the Respondent during the oral proceedings before the Board, was the provision of an alternative process for preparing dialkyl peroxydicarbonate compositions in which the product is stabilised during said process.

6.4 As the solution to this problem, the patent in suit according to the main request proposes the process according to claim 1 characterised by the addition of a compound of structure I, namely a maleate or fumarate diester, wherein the ester groups,  $R^1$  and  $R^2$ , when being an alkyl group, have 4 to 20 carbon atoms.

With regard to the specified amount of "10% to 90% by weight", no reference point is given for this amount, i.e. there is no reference to the entity representing 100%. Since several entities are imaginable, e.g. the weight of the total composition, the dialkyl peroxydicarbonate, or the theoretical yield of dialkyl peroxydicarbonate, this amount is virtually meaningless,



and thus cannot qualify as a feature clearly distinguishing the subject-matter claimed from the state of the art. In any case, it is not a feature characterising the invention, as the Respondent itself indicated that the amount of the compound of structure I was not intended to provide any inventive ingenuity. Therefore, this range is to be disregarded when assessing obviousness (see T 22/81, OJ EPO 1983, 226, points 5.1 and 7 of the reasons).

- 6.5 With regard to whether or not the problem defined in point 6.3 above *vis-à-vis* the closest prior art is successfully solved, there is no example in the patent in suit which exemplifies the claimed process. The Respondent, however, drew attention to the data in the patent in suit which showed that compounds of structure I, when added thereto, stabilised dialkyl peroxydicarbonates *per se*, and submitted that it was therefore credible for the skilled person that this stabilising effect would also be achieved when the compounds of structure I were added to the process for the preparation of such dialkyl peroxydicarbonates. This reasoning is convincing to the Board.
- 6.6 Finally, it remains to be decided whether or not the proposed solution to the problem underlying the disputed patent is obvious in view of the cited prior art.
- 6.6.1 Document (8) itself (see Table 1) already teaches the skilled person that other classes of compounds, such as esters, more particularly diethyl maleate, are effective stabilisers for dialkyl peroxydicarbonate compositions *per se*. This alone is a clear incentive

for the skilled person to also employ such a class of compound in order to stabilise a dialkyl peroxydicarbonate during a process for its preparation. The skilled person would thus also look to other documents which describe the stabilisation of peroxydicarbonates, such as document (10), which lists diethyl fumarate, dibutyl fumarate and dibutyl maleate as alternatives (see page 11, lines 12 to 13) for phlegmatising/stabilising *inter alia* peroxydicarbonates (see page 7, line 28). Thus by combining the teachings of documents (8) and (10), more particularly, by replacing the ethylenically unsaturated nitriles and acetylenes of document (8) with the dibutyl maleate or fumarate of document (10), the person skilled in the art would arrive at the solution proposed by the patent in suit, without exercising any inventive ingenuity.

6.7 For the following reasons the Board cannot accept the Respondent's arguments designed for supporting inventive step.

6.7.1 The Respondent submitted that the diethyl maleate of document (8), and the various compounds, including diethyl fumarate, dibutyl fumarate and dibutyl maleate, of document (10), were not described therein as stabilising (dialkyl) peroxydicarbonates during their preparation, but rather only for stabilising (dialkyl) peroxydicarbonate compositions *per se*.

However, the skilled person would expect that a compound which stabilised (dialkyl) peroxydicarbonates when added thereto would also stabilise the same compound in a process for its preparation when added to the reaction mixture. This view is indeed supported by

the Respondent's own submission, where it concluded from evidence in the patent in suit that the compounds of structure I stabilised dialkyl peroxydicarbonates *per se* rendered it credible for the skilled person that they would also stabilise dialkyl peroxydicarbonates when added to a process for the preparation thereof (see point 6.5 above). Thus, the skilled person had sufficient incentive to employ compounds of structure I, known from document (10) as stabilisers for peroxydicarbonates, as stabilisers in a process for the preparation thereof, with a reasonable expectation of success.

6.7.2 Furthermore, the Respondent argued that due to the length of the list of possible alternatives indicated from page 10, line 6 to page 13, line 23 of document (10), a skilled person would have had no incentive to specifically select dibutyl fumarate or dibutyl maleate.

However, the simple number of alternatives which a skilled person had at his disposition when looking for alternative stabilisers has no impact on the assessment of obviousness, since a mere arbitrary choice from a host of possible solutions does not in itself involve inventive ingenuity (see decision T 939/92, OJ EPO 1996, 309, points 2.5.2 and 2.5.3 of the reasons).

6.7.3 The Respondent also submitted that document (10) did not specifically refer to the stabilisation of dialkyl peroxydicarbonates, but merely to peroxydicarbonates, and was, in fact, primarily concerned with stabilising ketone peroxide compositions.

However, the generic term "peroxydicarbonate" embraces dialkyl peroxydicarbonates, the specific stabilisation of such dialkyl peroxydicarbonates with a dialkyl maleate being already taught by the closest document (8).

6.7.4 Finally, the Respondent submitted that di-C<sub>4</sub>-C<sub>20</sub>-alkyl maleates or fumarates were more resistant to hydrolysis than the di-C<sub>2</sub>-alkyl maleate and fumarate known as stabilisers for (dialkyl) peroxydicarbonates from documents (8) and (10), respectively, and thus more effective stabilisers in the preparation of dialkyl peroxydicarbonates in an aqueous alkaline medium.

However, whether a di-C<sub>4</sub>-C<sub>20</sub>-alkyl ester hydrolyses more slowly than a di-C<sub>2</sub>-alkyl ester and would therefore be a better stabiliser, is irrelevant when, in the present case, the problem consists merely of providing an alternative to the closest prior art embodiment, namely to a process which uses ethylenically unsaturated nitriles and acetylenes for the stabilisation of dialkyl peroxydicarbonate compositions during their preparation.

6.8 For these reasons, the solution proposed in claim 1 to the problem underlying the patent in suit is obvious in the light of the prior art.

6.9 As a result, the Respondent's main request is not allowable for lack of inventive step pursuant to Article 56 EPC.

*Auxiliary request*

7. *Amendments (Article 123(2) and (3) EPC)*

Claim 1 of the auxiliary request has been amended *vis-à-vis* claim 1 of the main request in that it is additionally specified that when the compound of structure I is added prior to purification, it is added "at the end of the reaction between the dialkyl chloroformate and the aqueous hydrogen-peroxide prior to separation of crude dialkyl peroxydicarbonate from the reaction mixture", said amendment finding a basis in claim 10 as originally filed. The amendment restricts the scope of the granted claims, such that the requirements of both Article 123(2) and (3) EPC are satisfied.

8. *Inventive step*

8.1 Claim 1 of the auxiliary request differs from claim 1 of the main request in that it is additionally specified that when the compound of structure I is added prior to purification, it is added at the end of the reaction between the dialkyl chloroformate and the aqueous hydrogen peroxide prior to separation of crude dialkyl peroxydicarbonate from the reaction mixture.

8.2 However, the closest prior art document (8) already discloses that the stabiliser may preferably be added at the end of the reaction step a) and before the initial organic phase/aqueous phase separation step (see column 7, lines 18 to 20) and thus the addition of the stabiliser of structure I at this same step of the process cannot contribute to inventiveness of the

subject-matter of claim 1 of the auxiliary request *vis-à-vis* that document. Therefore, the considerations having regard to the assessment of inventive step given in points 6.2 to 6.8 above and the conclusion drawn in point 6.9 above with respect to claim 1 of the main request apply also to claim 1 of the auxiliary request.

8.3 Thus, the auxiliary request is also not allowable for lack of inventive step pursuant to Article 56 EPC.

## **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:

C. Rodríguez Rodríguez

R. Freimuth