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**Datasheet for the decision  
of 24 January 2014**

**Case Number:** T 0175/12 - 3.3.01

**Application Number:** 04715068.5

**Publication Number:** 1618100

**IPC:** C07D301/10

**Language of the proceedings:** EN

**Title of invention:**

METHOD OF IMPROVING THE OPERATION OF A MANUFACTURING PROCESS

**Patent Proprietor:**

Shell Internationale Research Maatschappij B.V.

**Opponents:**

THE DOW CHEMICAL COMPANY  
Scientific Design Company Inc.

**Headword:**

Improved ethylene oxide manufacturing process/SHELL

**Relevant legal provisions:**

EPC Art. 123(2)  
RPBA Art. 12(4)

**Keyword:**

Renumbering of requests - (yes) -  
no change in the substance of the case  
Main request - admissibility - (no) -  
no reintroduction in appeal proceedings of a request not main-  
tained before the department of first instance  
Auxiliary requests 1 to 7 - not admitted -  
broadening of the claimed scope  
Auxiliary request 8 - not admitted -  
the opposition division exercised its discretion according to  
the right principles  
Auxiliary requests 9 to 19 - added matter - (yes) -  
combination of features not clearly and unambiguously derivable  
from the application as filed

**Decisions cited:**

T 0023/10, T 1705/07, T 0390/07

**Catchword:**



**Beschwerdekammern  
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Case Number: T 0175/12 - 3.3.01

**D E C I S I O N  
of Technical Board of Appeal 3.3.01  
of 24 January 2014**

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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted on 22 November  
2011 revoking European patent No. 1618100  
pursuant to Article 101(3) (b) EPC.

**Composition of the Board:**

**Chairman:** A. Lindner

**Members:** J. Ousset

D. Rogers

## **Summary of Facts and Submissions**

- I. The patentee (appellant) filed an appeal against the decision of the opposition division revoking European patent No. 1 618 100.
- II. The opposition division revoked the patent in suit for lack of inventive step. The appellant filed a main request and auxiliary requests 1 to 19 with its statement setting out the grounds of appeal. At the oral proceedings before the board these were renumbered (see point 2 of the reasons).
- III. The appellant's arguments can be summarised as follows:
- The amendments contained in auxiliary request 9 to 19 did not contravene Article 123(2) EPC. Table 1 in combination with different passages of the description represented a basis for these amendments. From the application as originally filed, it can be inferred that the fourth dioxide concentration was based on the total feed. Moreover, it was considered that in the absence of any explicit definition, the ratio was based on the total feed.
  - Auxiliary requests 9 to 19 were filed in reaction to the objections made by the opponents.
  - The renumbering of the claim requests submitted with the statement of the grounds of appeal did not create any new case and did not change the scope of the appeal.
  - In view of the finding of the opposition division as to the fact that the examples were outside of

the claimed scope, the data were to be plotted anew and could thus only be submitted with the grounds of appeal. Additionally to this, the amendments made to auxiliary requests 1 to 3 were made in order to overcome the objections as to the possible loss of the priority right and as to the sufficiency of disclosure.

- The new feature added at the end of claim 1 of auxiliary requests 4 to 7 aimed at overcoming a ground of revocation.
- The appellant had had little opportunity to express its views as to the admissibility of a new main request (identical to current auxiliary request 8). In view of the minutes, the discussion of admissibility took only eighteen minutes. Therefore, the opposition division did not exercise its discretion according to the right principles.

IV. The respondents argued mainly as follows:

- The renumbering of the requests submitted with the statement setting out the grounds of appeal was an abuse of procedure. The respondents were not prepared for such requests.
- Auxiliary requests 9 to 19 were essentially based on the same subject matter. However, in these requests the fourth carbon dioxide concentration was now based on the total reactor feed instead of the mixture of oxygen carbon dioxide and ethylene. The range from 4 to 20 mole percent, based on the reactor feed for the first carbon dioxide concentration was extracted from the description.

These requests should thus not be admitted into the proceedings.

- V. The appellant (patent proprietor) requested that the decision under appeal be set aside and that a patent be maintained upon the basis of the Main Request, or, alternatively, upon the basis of any of the Auxiliary Requests 1 - 19, all filed at the oral proceedings before the Board on 24 January 2014.
  
- VI. The respondents (opponents 1 and 2) requested that the appeal be dismissed; that the Main Request and Auxiliary Requests 1-19 not be admitted into the proceedings; and that Annexes 6-9 and the other documents filed by the appellant under cover of a letter dated 24 December 2013 not be admitted into the proceedings.
  
- VII. At the end of the oral proceedings, the decision of the board was announced.

### **Reasons for the Decision**

- 1. The appeal is admissible.

*Renumbering of the claim requests filed with the grounds of appeal.*

- 2. At the beginning of the oral proceedings, the appellant renumbered the claim requests. Auxiliary requests 16 to 19 as filed with the grounds of appeal were respectively renumbered as main and auxiliary requests 1 to 3. The main request and auxiliary requests 1 to 15 filed with the grounds of appeal were respectively renumbered as auxiliary requests 4 to 19.

- 2.1 Contrary to the respondents' opinion, the renumbering of the sets of claims filed with the statement setting out the grounds of appeal does not create any new case which the respondents are not prepared for. The renumbering only results in a change in the order in which the arguments will be presented by the parties. Furthermore, it cannot be reasonably argued that the respondents were not prepared to argue on the substance of these requests and that the said renumbering amounts to an abuse of procedure. The respondents' arguments do not need to be modified due to such a renumbering.
- 2.2 The board concludes that the renumbering of the claim requests filed with the statement of the grounds of appeal as submitted at the beginning of the oral proceedings is admissible.

*Admissibility of the main request.*

3. After having received the grounds of opposition from the respondents, the appellant-patentee filed a reply with a letter of 8 September 2010 which included a set of claims as presented as the new main request. With its summons to oral proceedings, the opposition division sent an annex in which it notified the parties that during oral proceedings, it would be discussed whether the carbon dioxide concentration is automatically lowered to below 3 mole percent when the high activity catalyst is replaced by a high selectivity catalyst. One month before oral proceedings before the department of first instance, thus on 13 September 2011, the appellant-patentee filed a new main request as well as four auxiliary requests and requested that its patent be maintained on the basis of this new main request replacing the previous one filed on 8 September 2010. The present main request is



identical to the main request filed on 8 September 2010 and which was withdrawn by the appellant. Therefore, by withdrawing this request, the appellant prevented the opposition division from deciding thereon. According to Article 12(4) of the Rules of procedure of the Boards of Appeal (RPBA), the board has the discretion to hold inadmissible requests which could have been submitted before the department of first instance. The main request was actually submitted and then withdrawn during the proceedings before the first instance. In view thereof, the reintroduction of this request at the stage of the appeal is not admissible (see T 390/07, points 1, 2, and 3 of the reasons).

- 3.1.1 The appellant argued that there was a mistake as to the comparative data and the scope of the main request, both submitted with the letter of 13 September 2011. In view of the findings of the opposition division in its decision of 13 October 2011, the data should have been plotted anew. This could not be done during the oral hearing before the opposition division. Thus, these data - now valid for all the requests currently on file - were submitted with the grounds of appeal.

It is not only acknowledged by the appellant but also indisputable that the comparative data provided by the appellant did not disclose subject-matter falling under the main or auxiliary requests submitted with letter of 13 September 2011. However, this is irrelevant in the present case, since the appellant deliberately replaced the main request filed with letter of 8 September 2010 by another main request on which the opposition division based its decision thus indicating that it was no longer ready to defend the subject-matter of the main request filed with letter of 8 September 2010. Therefore, this request could and should have been

maintained during the proceedings before the department of first instance.

- 3.2 In accordance with Article 12(4) RPBA, the board decides not to admit the main request into the proceedings.

*Admissibility of auxiliary requests 1 to 3.*

4. In these requests, the fourth carbon dioxide concentration is below 3 mol% whereas this concentration value was below 2 mol% in all the requests defended by the appellant and on which the decision of the opposition was based. Thus, the subject-matter on which the appellant seeks to have a patent granted is broader than the one it defended before the opposition division. It is not the purpose of the appeal procedure to deal with subject-matter which should and could have been dealt with by the department of first instance (see T 1705/07, points 8.4 to 8.7). Furthermore, the appellant (then patentee) refrained from further argument on the patentability of the auxiliary requests pending before the opposition division. Additionally, it requested a decision according to the state of the file (see minutes of the oral proceedings, page 6, third paragraph) after the opposition division gave its negative opinion as to the inventiveness of the main request, indicating therefore that it did not intend to further defend and/or amend its case. Hence, submitting these requests, whose scope is broader than that of the requests constantly defended by the appellant and on which the appealed decision was based, runs counter to the principle of a fair and reliable conduct of judicial proceedings (see T 23/10, point 2.8).

4.1 As to the admissibility of auxiliary requests 1 to 3, the appellant maintained the same argument (see 3.1.1 above) and further added that these requests were filed in view of overcoming the objections of lack of novelty and insufficiency of disclosure.

4.1.1 The sufficiency of disclosure as well as the novelty of the claimed matter was already objected to by the respondents (then opponents) in their respective notices of opposition. Moreover, their arguments remained substantially the same during the proceedings before the department of first instance. Hence, there is no substantive reason justifying the filing of new requests for the first time at the stage of the appeal in order to overcome the objections of lack of reproducibility and lack of novelty. The board also finds the argument based on the error in the comparative data submitted by the appellant unconvincing (see below, point 5.1).

4.2 Thus, the board does not admit auxiliary requests 1 to 3, since they could and should have been presented before the department of first instance and their subject-matter departs from the one defended before the said department (Article 12(4) RPBA).

*Admissibility of auxiliary requests 4 to 7.*

5. The fourth concentration of carbon dioxide is no longer limited to any specific amount in claim 1 of these requests. The subject-matter of claim 1 of these requests is thus notably broader than the one of the main request on which the decision of the opposition division is based. It therefore has to be considered whether these requests can be regarded as admissible (Article 12(4) RPBA).

5.1 Regarding the various requests filed at the proceedings before the opposition division, reference is made to point 3 above. It is once again emphasized that in all the appellant's requests on which the decision under appeal is based, the fourth carbon dioxide concentration was below 2 mol%. At the stage of the appeal, for the first time the appellant filed the present requests whose scope is much broader than the scope of the claims defended before the department of first instance. The appellant essentially put forward the following arguments (see point 5.1.1) in favour of the admissibility.

5.1.1 The feature extracted from the description "...wherein said lower fourth carbon dioxide concentration in said second reactor feed is obtained by modifying either the operation or structure of the carbon dioxide removal system..." and added at the end of the wording of claim 1 of auxiliary requests 4 to 7 aimed at attempting to explain what has to be done to reproduce the claimed process. However, the appellant did not explain in which way this new feature would contribute to an inventive step, which was the ground upon which the opposition division had rejected all requests admitted into the proceedings before the department of first instance.

5.1.2 Secondly, the appellant argued that the patent was revoked on the basis of lack of inventive step mainly because the data provided by the appellant fell outside the scope of the then pending main request and hence could not be used to support the contention that the subject-matter of the main request showed an improvement. By filing at the stage of the appeal claims whose scope is broader than the scope of claim 1

on which the decision of the opposition division was based, the appellant has sought to overcome this issue. The board considers that, irrespective of the fact that the subject-matter for which the opposition division failed to acknowledge an improvement is still encompassed by the present requests, the appellant should have been aware of this issue earlier in the proceedings.

Therefore, the submission and examination of such a broad claim should have been done before the department of first instance. This situation only results from the appellant's own action of filing inappropriate comparative data (see above). This cannot justify that the discretion of the board is exercised in its favour.

- 5.2 In the light of the above and since the appeal proceedings are meant to review the decision of the department of first instance and not to start the case anew, the board does not admit auxiliary requests 4 to 7 into the proceedings (Article 12(4) RPBA).

*Admissibility of auxiliary request 8.*

6. Auxiliary request 8 is identical to the new main request that the appellant filed during oral proceedings before the opposition division once the division decided that the main request on file was not inventive. It was not admitted by the opposition division and its admissibility is an issue to be decided by the board.

- 6.1 The appellant contended that the opposition division did not exercise its discretion according to the right principles. The opposition division did not give the

appellant sufficient time to present its argument, since only eighteen minutes were granted.

- 6.1.1 As to the time given to the parties to express their view on the admissibility of this request, the board observes that the length of an oral submission and its effectiveness do not necessarily have a direct relationship. Any professional representative should expect when filing a new request during oral proceedings before an instance of the EPO that the deciding body will ask it to explain the reasons for this late-filing. Furthermore, both parties could express their views several times (see minutes, page 5, first paragraph). Consequently, the board considers that sufficient time was given to the appellant to express its argument.

Moreover, the board is also convinced that the opposition division exercised its discretion according to the right principles. Both parties were given time to present their respective argument and a reasoned decision was issued afterwards indicating why this late-filed request was not admitted.

- 6.2 The board decides not to admit auxiliary request 8 into the proceedings.

*Auxiliary requests 9 to 19.*

## 7. Admissibility

- 7.1 Since these requests were filed with the statement setting out the grounds of appeal, the board has to assess their admissibility (see Article 12(4) RPBA).

7.2 The respondents submitted that the introduction of the feature "...in the range of from 4 to 20 mole percent, based on the reactor feed..." for the first carbon dioxide concentration was taken from the description and, thus its introduction constituted an abuse of procedure. It was further added that for all requests, the fourth carbon dioxide concentration was based on the reactor feed and no longer on the amounts of oxygen, carbon dioxide and ethylene in the said feed.

7.2.1 It is not disputed that the feature "...in the range of from 4 to 20 mole percent, based on the reactor feed..." for the first carbon dioxide concentration was taken from the description. However, this feature was already present in the requests not admitted by the opposition division (see auxiliary request 8). That the appellant filed requests containing this feature at the stage of the appeal does not therefore constitute a surprise. Moreover, this feature does not result in divergent subject-matter but represents a limitation of the claimed scope. As to the nature of the reactor feed to be considered for the fourth carbon dioxide concentration, the board also considers that it represents a normal reaction to the decision of the opposition, since it does not amount to a more complex case and does not drastically change the scope of the claimed subject-matter.

7.3 Auxiliary requests 9 to 19 are thus admitted into the proceedings (Article 12(4) RPBA).

8. Added matter

8.1 The fourth carbon dioxide concentration in auxiliary requests 9 to 19 is now based on the reactor feed instead of being based on the total moles of ethylene,

oxygen and carbon dioxide. Whether this amendment is in accordance with Article 123(2) EPC has to be assessed.

- 8.1.1 To justify this amendment, the appellant referred to page 13, Table 1 of the application as originally filed. In this table, the concentrations of the first carbon dioxide and the fourth carbon dioxide are given in combination. From the content of the description and from common practice, the person skilled in the art would regard these values as based on the reactor feed. The appellant also referred to several prior art documents to support its assertion. The appellant referred as well to page 9, lines 13 to 17; page 12, line 24 and the heading of Table 1.

The appellant argued that it is the skilled person's common practice to conclude that in the absence of specific information in Table 1, as to the basis for assessing this ratio, the concentration of carbon dioxide was based on the reactor feed. However, the same skilled person would also consider the content of the application as originally filed. Therefrom, it would notice that the specific concentrations of carbon dioxide to obtain the best results are lower than 2 mole percent and preferably lower than 1.5 mole percent and lower than 1 mole percent (see page 8, lines 8 to 15) based on the total moles of carbon dioxide, oxygen and ethylene. The skilled person would also notice that claims 2 to 4 as originally filed describe a concentration range for carbon dioxide based also on the total moles of carbon dioxide, oxygen and ethylene. It is not disputed that on page 12, line 24, the carbon dioxide concentration "...can be less than 2 mole percent of the total stream..." This value is nevertheless disclosed in a context requiring a modification either of the operation or structure of



the carbon dioxide removal system (see page 12, lines 17 to 20). This feature is not present in auxiliary requests 9 to 19. The passage cited by the appellant on page 9, lines 13 to 17 also refers to a "gaseous recycle stream". However, none of these passages can be directly and unambiguously linked to the carbon dioxide concentrations listed in Table 1. Consequently, it cannot be unambiguously asserted that the values for the carbon dioxide concentrations listed in Table 1 are based on the total reactor feed.

8.2 Since in claim 1 of all of auxiliary requests 9 to 19, the fourth carbon dioxide concentration is based on the reactor feed, the board concludes that these requests do not comply with the requirements of Article 123(2) EPC.

## Order

### **For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:



G. Nachtigall

A. Lindner

Decision electronically authenticated