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**Datasheet for the decision  
of the Enlarged Board of Appeal  
of 21 January 2009**

**Case Number:** R 0009/08  
**Appeal Number:** T 1527/05 - 3.3.05  
**Application Number:** 00942993.7  
**Publication Number:** 1189686  
**IPC:** B01F 05/06  
**Language of the proceedings:** EN

**Title of invention:**  
Stacked Static Mixing Elements

**Patentee:**  
Sulzer Chemtech AG

**Other party:**  
Bayer Technology Services GmbH

**Headword:**  
Fundamental violation of Article 113/SULZER

**Relevant legal provisions:**  
EPC Art. 112a, 113  
EPC R. 106, 107

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

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**Keyword:**  
"Petition for review - admissible - clearly unallowable"

**Decisions cited:**  
R 0002/08

**Catchword:**

-



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**Case Number:** R 0009/08

**D E C I S I O N**  
**of the Enlarged Board of Appeal**  
**of 21 January 2009**

**Other Party:**  
(Opponent)

Bayer Technology Services GmbH  
Bayer Chemiepark  
D-51368 Leverkusen (DE)

**Petitioner:**  
(Proprietor of the patent)

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**Representative:**

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**Decision under appeal:**

**Decision of the Technical Board of Appeal  
3.3.05 of the European Patent Office of  
4 June 2008.**

**Composition of the Board:**

**Chairman:** P. Messerli  
**Members:** B. Günzel  
A. Klein

## Summary of Facts and Submissions

I. The petition for review concerns decision T 1527/05 of Board of Appeal 3.3.05 of 4 June 2008 revoking European patent No. 1 189 686. The patent concerned a static mixer and in particular the construction and arrangement of its saddle elements.

II. The proceedings leading to decision T 1527/05 can be summarised as follows:

(i) In the opposition proceedings the opposition division maintained the patent in amended form on the basis of the second auxiliary request submitted during the oral proceedings before it. The main and the first auxiliary request were rejected for lack of novelty of claim 1 of both requests over document 01/02 (02=translation of 01).

The subject-matter of claim 1 as maintained by the opposition division was considered as involving an inventive step. Starting from document 01/02, and even if the skilled person would have consulted document 05 as a source for solution concepts, he would have considered a number of more obvious possibilities and found different suitable solutions before coming to 05.

(ii) Appeals were lodged by the opponent and the patent proprietor.

In the appeal proceedings the patent proprietor submitted a new main and auxiliary request.

The opponent objected to claim 1 of the main request on the ground of lack of novelty in the light of document 01/02 and to claim 1 of the auxiliary request on the ground of lack of inventive step over the combined teachings of documents 01/02 and 05. In its grounds of appeal the opponent had already objected to the subject-matter upheld by the opposition division as lacking an inventive step over 01/02 taken in combination with 05.

The patent proprietor acknowledged that the starting point for evaluating inventive step was 01/02. The skilled person would, however, not consider 05 as relevant because problems of assembly/disassembly of the device were not addressed in this document. Moreover, for reasons which were further specified by the patent proprietor, a combination of 01/02 with 05 would also not lead to the subject-matter of claim 1 of the auxiliary request.

III. In its decision T 1527/05 of 4 June 2008 Board of Appeal 3.3.05 revoked the patent. The board rejected the patent proprietor's main request for lack of novelty over document 01/02 and the auxiliary request for lack of inventive step in view of document 01/02 in combination with document 05.

As regards the patent proprietor's auxiliary request the reasoning of the board was essentially as follows:

- (i) In agreement with the parties, document 01/02 is taken as the starting point for assessing inventive step. In the light of 01/02 the problem to be solved by the patent in suit can only be seen in the provision of an improved assembly and disassembly of the static mixer structure claimed because the static mixer of 01/02 may also be disassembled, even if this is far more complicated than in the patent-in-suit (points 2.3 to 2.5 of the reasons).

The subject-matter of claim 1 is distinguished from 01/02 in that the individual saddle element comprises at the edge surfaces notches and tabs aligning and bringing the element in mated, contacting relationship with an adjacent element in a stack of elements being separately mounted on the central axis to permit individual removal of the saddle elements from each other (point 2.6 of the reasons).

The skilled person is aware of document 05, which discloses a stationary material mixing apparatus (i.e. a static mixer). In particular, the individual biscuits (=saddle elements, addition by the Enlarged Board) possess side walls which are notched so that adjacent biscuits are in a nesting or interlocking relationship (point 2.7 of the reasons).

Document 05 does not explicitly mention that the static mixer can be easily assembled or disassembled, however under the heading "Background of the invention", 05 explains that

"prior art approaches to static mixers have generally involved... fabrication of component mixer elements coupled with some type of permanent attachment between elements and a conduit and/or between elements within a conduit" (lines 23 to 28). Under the same heading, 05 describes the prior art mixing apparatus depicted in US-A-3923288 which comprises a plurality of self nesting, abutting and actually overlapping elements fitted into a conduit - as being a "marked improvement in static mixer technology" (column 1, lines 36 to 43) (point 2.8 of the reasons).

Accordingly, the above excerpts clearly and unambiguously show that at the filing date of 05 permanent attachments between mixing elements were one of the drawbacks in the present technical field, and that one of the concerns was, implicitly, the ease of assembly or disassembly of such devices (point 2.8 of the reasons).

Figures 3 and 4 of 05 (reproduced in the decision), which are representative of the static mixer depicted in 05, disclose a device overcoming the above-mentioned prior art problem, i.e. a static mixer which unequivocally can be easily assembled and disassembled (point 2.8 of the reasons).

In this context the skilled person starting from the static mixer disclosed in 01/02 and faced with the problem of an improved assembly and disassembly thereof would inevitably consider the

side walls design of the static mixer (Figures 3 and 4) of 05 as a promising way of solving his problem (point 2.9 of the reasons).

(ii) The decision of the board then goes on to set out in detail why the board considers 05 to disclose all the features by which claim 1 is distinguished from 01/02 (point 2.10 of the reasons). As documents 01/02 and 05 furthermore contain no information which might deter the skilled person from combining the teachings, the board concludes that the subject-matter of claim 1 was obvious to a person skilled in the art (point 2.11 of the reasons).

IV. On 27 October 2008 the proprietor of the patent (hereinafter: the petitioner) filed a petition for review of the decision by the Enlarged Board of Appeal pursuant to Article 112a EPC.

The petition is based on the ground referred to in Article 112a(2)c) EPC that a fundamental violation of Article 113 occurred.

V. The submissions of the petitioner may be summarised as follows:

(i) In its assessment of inventive step the Board of Appeal has taken into account the disclosure of a document, i.e. US-A-3923288, which had not been in the proceedings and on which the petitioner therefore could not comment. The evaluation of this document by the Board of Appeal has become known to the petitioner only with the notification

of the written grounds for the decision, and since the taking into account of the whole contents of the said US document was obviously decisive for the board's negative finding on inventive step, a fundamental violation of Article 113 within the meaning of Article 112(2)c) EPC has occurred. In paragraphs IX and X of decision T 1527/05 the arguments submitted by the parties are summarised. It is also stated, in the context of the main request as well as of the only auxiliary request, that documents 01/02 and 05 are the only documents which were discussed for the assessment of patentability.

- (ii) In agreement with the parties document 01/02 had been considered as closest prior art, novelty of the subject-matter of claim 1 of the auxiliary request being also undisputed.
  
- (iii) One of the questions which had been essential for the assessment of inventive step had been whether it was known from the art to provide for a static mixer structure which would be easy to maintain and to clean. In point 2.8 of the reasons the board acknowledges that document 05 does not explicitly disclose that the static mixer described in it can be easily disassembled and assembled and thereby also easily maintained and cleaned. With respect to what is said in 05 under the heading "Background of the invention" the Board of Appeal then also notes that in the known static mixers the individual elements were coupled with some type of permanent attachment and there



was thus no possibility of an easy disassembly or easy maintenance and cleaning.

In the second half of the first paragraph on page 14 of its decision the board then refers to document US-A-3923288 which had not been introduced into the procedure and had not been discussed during the proceedings. The board then draws conclusions from this document that are decisive for the board's negative finding on inventive step. The reasons given by the board make it clear that the board in its assessment of inventive step not only considered the passages in 05 citing from US-A-3923288 but that it has taken into account the whole contents of this document.

This is to be derived from the use of the word "depicted" in point 2.8 of the reasons of the decision. This means that document US-A-3923288 has been considered in its entirety, i.e. also the figures of the said US document have been considered. Otherwise the term "depicted" could not have been used.

Moreover, the conclusion drawn by the board from the passage of US-A-3923288 reproduced in 05 that this passage clearly and unambiguously shows that at the filing date of 05 permanent attachments between mixing elements were one of the drawbacks in the present technical field, and that one of the concerns was, implicitly, the ease of assembly or disassembly of such devices, also shows that the Board of Appeal has actually taken into account the whole contents of the said US

document. This is so because that conclusion could only be justified if document 05 under the heading "Background of the invention" already disclosed a static mixer with a plurality of simply assembled individual elements, which elements were as a consequence then also easy to disassemble again. However, the features "self nesting, abutting and axially overlapping" reproduced in 05 from US-A-3923288 do not disclose that these individual elements are not coupled with some type of permanent attachment. Nor can the conclusion that the ease of assembly or disassembly of such devices was one of the concerns be derived from the indication "marked improvement in static mixer technology" used in column 1, line 35 of 05 in relation to the disclosure of the US document because the said statement in 05 reproduced from the US document only relates to the further indication that "each region of actual overlap between elements provides a mixing matrix introducing complex velocity vectors into the materials".

## **Reasons for the Decision**

### *Admissibility of the petition*

1. The petitioner is adversely affected by the decision T 1527/05 to revoke its patent. The petition for review was filed on the ground referred to in Article 112a(2)c) EPC.

2. The written reasons for the decision in T 1527/05 were notified to the parties by registered letter posted on 4 September 2008. The written reasoned petition was filed on 27 October 2008. The fee for the petition for review was paid on the same day. The petition therefore complies with Article 112a(4) EPC.
  
3. Pursuant to Rule 106 EPC a petition under Article 112a(2)a) to d) EPC is only admissible where an objection in respect of the procedural defect was raised during the appeal proceedings and dismissed by the Board of Appeal, except where such objection could not be raised during the appeal proceedings. In the present case the petitioner's contention is, that the written reasons of the decision for revocation of the patent were based on the consideration of a document which had never been introduced into the proceedings and had never been discussed in these proceedings. On this assumption the exceptional condition of Rule 106 EPC is fulfilled in the present case, because, were it so as the petitioner contends, the petitioner only learnt from the written reasons of the decision, that the said document was taken into consideration by the Board of Appeal.
  
4. The petition also contains the petitioner's reasons for setting aside the decision of the Board of Appeal and the facts on which the petition is based within the meaning of Rule 107(2) EPC and is therefore admissible.

*Allowability of the petition*

5. The petition is, however, clearly unallowable.

The petition is based on the contention that for its finding that claim 1 of the auxiliary request was not inventive the Board of Appeal had not only considered the passage of document US-A-3923288 reproduced in document 05 but that it had considered its whole contents or, in view of the term "depicted" used by the board in point 2.8 of the reasons, at least the figures of the said US document. However, this document had never been introduced into the proceedings as such.

6. The petitioner's contention is clearly incorrect. None of the interpretations given to and conclusions drawn by the petitioner from the passages of the attacked decision cited by the petitioner can in fact be derived from the reasons of that decision.

- 6.1 This concerns first of all the use of the term "depicted" in point 2.8 of the reasons. Even though it may be true that the term "to depict" has in first line the meaning of representing something by a picture, it also embraces as a possible meaning to represent something in words (Shorter, Oxford English dictionary, Volume 1, 5th edition, "to depict"). In the present context it is quite clear that the board has used the term "depicted" in the latter sense, i.e. in the sense of "described" - whether most conveniently or not - and therefore no conclusion can be drawn from the use of that term to the effect that the Board of Appeal had in mind of referring therewith to the drawings of US-A-3923288. The board's use in the attacked decision of

the term "depicted" in the sense of "described" also becomes apparent from the last paragraph of point 2.8 of the reasons. In this paragraph the board speaks of "the figures 3 and 4 of 05 which are representative of the static mixer "depicted" in 05". Here, the board also uses the word "depicted" to refer to passages of 05 other than the figures and thus in the same sense as in the previously cited passage in point 2.8 of the reasons. Hence, the use of the term "depicted" in the cited passages is no indication that the board wished to refer thereby to (moreover unspecified) passages of the said US document other than the ones reproduced in 05.

- 6.2 The second paragraph of point 2.8 of the reasons containing the board's conclusion on the problem derivable from 05 starts with the wording "Accordingly, the above excerpts clearly and unambiguously show...". The excerpts referred to thereby are the excerpts reproduced by the board in the previous paragraph of point 2.8 of the reasons, namely the statement in 05 (column 1, lines 23 to 28) under "Background of the invention" that "*prior art approaches to static mixers have generally involved ...fabrication of component mixer elements coupled with some type of permanent attachment between elements and a conduit and/or between elements within a conduit" and the statement under the same heading in 05 (column 1, lines 36 to 43) describing the prior art mixing apparatus depicted in US-A-3923288 - which comprises a plurality of self-nesting, abutting and axially overlapping elements fitted into a conduit - as being a "*marked improvement in static mixer technology*".*

Hence, the board derives its conclusion that at the filing date of 05 permanent attachment between mixing elements was one of the drawbacks in the present technical field, and, that one of the concerns was, implicitly, the ease of assembly or disassembly of such device, from what is stated in 05 about the prior art and the document US-A-3923288 and no reference to passages of the said US document other than the ones actually reproduced in 05 can be read into that wording.

- 6.3 The petitioner furthermore bases its conclusion that the Board of Appeal had considered the whole contents of US-A-3923288 on the following argument: The board could not have arrived at the conclusion that at the filing date of 05 the ease of assembly or disassembly was a concern simply from the passage reproduced from US-A-3923288 in 05 reading "which comprises a plurality of self nesting, abutting and actually overlapping elements fitted into a conduit", because the said passage alone would not justify such a conclusion.

In the context of review proceedings that argument must fail as it would require the Enlarged Board to examine whether or not the substantive conclusions arrived at by the board in assessing the disclosure of 05 were justified. As has been said by the Enlarged Board in its decision R 2/08 of 11 September 2008 (point 5 of the reasons) and as clearly derives from the legislative history of the provisions on petitions for review, under no circumstances may the petition for review be a means to review the correct application of substantive law (See: Revision of the European Patent Convention (EPC 2000), synoptic presentation EPC

1973/2000/part I: the Articles, OJ EPO, special edition 4/2007). Therefore, whether or not the Board of Appeal in point 2.8 of the reasons has drawn the correct conclusions from the meaning of the passage in 05 concerning the US document, is not subject to review by the Enlarged Board of Appeal. Therefore, the argument submitted by the petitioner, that because the conclusion drawn by the Board of Appeal would only be correct if the reference to the said US document in point 2.8 of the reasons was understood as a reference to the whole contents of that document, cannot succeed before the Enlarged Board. What matters is only what has actually been said in the attacked decision, whether correct or not, and upon reading the passages of the attacked decision cited by the appellant no conclusion is possible that the board would have had an intention to refer to contents of the US document other than to the passage reproduced from it in 05.

- 6.4 The same applies to the argument raised by the petitioner under point 7.3 of its petition with respect to the statement "marked improvement in static mixer technology" used in column 1, line 35 of 05 in relation to the disclosure in US-A-3923288. The petitioner has submitted that this statement in 05 only concerns the further statement in the said US document also reproduced in 05 "each region of actual overlap between elements provides a mixing matrix introducing complex velocity vectors into the materials" and therefore does not justify the conclusion of the Board of Appeal that the said statement in 05 shows that at the filing date of 05 one of the concerns was the ease of assembly or disassembly of such devices. Again, this is not subject to review by the Enlarged Board. What matters is that

the board has interpreted the cited passage in 05 in a certain way and, again, there is no indication in the reasons for the decision that in order to arrive at its conclusions the board has had recourse to passages of the said US document other than the one reproduced in 05 and expressly referred to by the Board of Appeal.

Accordingly, the objections raised by the petitioner are clearly unfounded and therefore the petition for review is clearly unallowable.

## **Order**

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

The petition for review is rejected as clearly unallowable.

The Registrar:

The Chairman:

W. Roepstorff

P. Messerli