

**Internal distribution code:**

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

**Datasheet for the decision  
of 3 December 2008**

**Case Number:** T 0566/06 - 3.3.01

**Application Number:** 95927984.5

**Publication Number:** 0775441

**IPC:** A01N 25/18

**Language of the proceedings:** EN

**Title of invention:**  
Insect pest control method

**Patentee:**  
Earth Chemical Co., Ltd.

**Opponent:**  
Nojima, Mitsuo

**Headword:**  
Insect pest control method and apparatus/EARTH CHEMICAL CO LTD.

**Relevant legal provisions:**  
EPC Art. 123(2)(3), 100a)b)c), 56, 54(2)  
RPBA Art. 13(1)

**Keyword:**  
"Main request - amendments extending beyond the content of the application as filed (yes)"  
"Auxiliary requests 1 - 9, 13 not clearly allowable"  
"Auxiliary requests 10 and 11 - not novel"  
"Auxiliary requests 12 and 14 - not inventive"

**Decisions cited:**  
G 0009/91, T 0840/93

**Catchword:**  
-



Case Number: T 0566/06 - 3.3.01

**DECISION**  
of the Technical Board of Appeal 3.3.01  
of 3 December 2008

**Appellant I:** Nojima, Mitsuo  
(Opponent) 1-6-18-112, Kamata, Ota-ku  
Tokyo (JP)

**Representative:** Kihn, Pierre Emile Joseph  
Office Ernest T. Freylinger S.A.  
234, route d'Arlon  
B.P. 48  
LU-8001 Strassen (LU)

**Appellant II:** Earth Chemical Co., Ltd.  
(Patent Proprietor) 9, Tsukasa-cho 2-chome, Kanda  
Chiyoda-ku  
Tokyo 101 (JP)

**Representative:** Grünecker, Kinkeldey,  
Stockmair & Schwanhäusser  
Anwaltssozietät  
Leopoldstrasse 4  
D-80802 München (DE)

**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
28 February 2006 concerning maintenance of  
European patent No. 0775441 in amended form.

**Composition of the Board:**

**Chairman:** P. Ranguis  
**Members:** J.-B. Ousset  
D. S. Rogers

## Summary of Facts and Submissions

- I. The appeal lies from the decision of the opposition division to maintain the patent EP-B-0 775 441 in an amended version in the form of the then pending third auxiliary request.

Since both parties are appellants, they will be referred to in this decision as patentee and opponent.

- II. Claim 1 of the main request (granted version) read as follows:

"1. An insect pest control method which comprises: supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30°C, to prepare a preparation-retaining material; setting the preparation-retaining material so that an air-current raised by a fan is applied to and passed into the preparation-retaining material; and releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the first auxiliary request read as follows:

"1. An insect pest control method which comprises supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30°C, to prepare a preparation-retaining material; setting the

preparation-retaining material so that an air-current raised by a fan is applied to and passed through the preparation-retaining material; and releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the second auxiliary request read as follows:

"1. An insect pest control method which comprises: supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30°C, to prepare a preparation-retaining material; setting the preparation-retaining material so that an air-current raised by a fan is applied to and passed through the preparation-retaining material; wherein the preparation-retaining material is set in an air passageway fixed at at least one location in the air passageway; and releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the third auxiliary request read as follows:

"1. An insect pest control apparatus which comprises a main body having a ventilation means leading to a vent hole and a preparation-retaining material comprising a preparation supported on a carrier set at one or more locations within the ventilation means wherein the preparation-retaining material contains at least one pesticidal component selected among compounds

having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30°C; and an air current raised by a fan at the vent hole is applied to and passed through the preparation-retaining material set in the ventilation means to release the pesticidal component under non-heating conditions; wherein the vent hole includes an air intake and a vapor outlet; wherein the preparation-retaining material is set in the air intake or the vapor outlet side of the fan".

III. Opposition has been filed against the patent in suit for lack of novelty and inventive step (Article 100(a) EPC), insufficiency of disclosure (Article 100(b) EPC) and on the ground that the subject-matter of the patent in suit extended beyond the content of the application as originally filed (Article 100(c) EPC).

The opposition was supported *inter alia* by documents:

- (1) JP-A-05-68459 and its English version
- (3) US-A-4,035,451

IV. The opposition division considered that:

- the subject-matter of claims 1 and 3 as granted gave rise to objections under Article 100(c) EPC given that the term "passed into" was not commensurate but narrower than the term "to contact" as originally filed.
- Claim 1 of the first auxiliary request was not novel over document (1) since the term "setting" in claim 1 could be interpreted as unmoveable and the expression "air current raised by a fan" did

not indicate that the preparation-retaining material was necessarily separated from the fan. There was thus no distinguishing feature over document (1).

- Claim 1 of the second auxiliary request was not novel over document (1) since the term "fixed" did not imply that the preparation-retaining material did not rotate.
  
- The third auxiliary request fulfilled the requirements of Article 123(2) and (3) EPC. The claimed matter was novel vis-à-vis document (1) due to the positioning of the preparation-retaining material and the presence of a vent hole. Due to the specific pesticidal components selected within the range of claim 1, novelty was acknowledged vis-à-vis document (3). Regarding inventive step, the person skilled in the art would not have found any teaching in document (3) to select the specific range of pesticides as mentioned in claim 1. Moreover, document (1) did not suggest any possibility to encase the fan and thus, starting from document (1) alone the proposed solution was not obvious. Furthermore, the person skilled in the art, starting from document (3) would not turn to document (1) relating to a different type of apparatus. Even if the person skilled in the art were to combine document (3) with document (1), then the suggestions in document (1) of applying heating to the range of pesticides mentioned in the patent in suit, would deter him from the claimed subject-matter, which does not require any heating.

V. With its statement of grounds of appeal, the patentee filed twelve sets of claims. A main request (identical to the granted version of the claims) and auxiliary requests 1 to 11.

Claim 1 of the first auxiliary request read as follows:

"1. An insect pest control method which comprises: supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, to prepare a preparation-retaining material;

setting the preparation-retaining material so that an air current raised by a fan contacts the preparation-retaining material; and

releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the second auxiliary request read as follows:

"1. An insect pest control method which comprises: supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, to prepare a preparation-retaining material;

setting the preparation-retaining material so that an air current raised by a fan is applied to and passed into the preparation-retaining material;

wherein the preparation-retaining material is fixed at least one location in the air passageway created by the fan; and

releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the third auxiliary request read as follows:

"1. An insect pest control method which comprises: supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, to prepare a preparation-retaining material;

setting the preparation-retaining material in which the preparation-retaining material is air-permeable;

wherein the preparation-retaining material is fixed at least one location in the air passageway created by the fan; and

releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the fourth auxiliary request read as follows:



"1. An insect pest control method which comprises:  
supporting on a carrier a preparation containing at  
least one pesticidal component selected from among  
compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa  
( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, to  
prepare a preparation-retaining material;

setting the preparation-retaining material so that an  
air current raised by a fan contacts the preparation-  
retaining material;

wherein the preparation-retaining material is fixed at  
least one location in the air passageway created by the  
fan; and

releasing the pesticidal component from the  
preparation-retaining material into the air under non-  
heating conditions to control insect pests."

Claim 1 of the fifth auxiliary request read as follows:

"1. An insect pest control method which comprises:  
supporting on a carrier a preparation containing at  
least one pesticidal component selected from among  
compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa  
( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, to  
prepare a preparation-retaining material;

setting the preparation-retaining material in which the  
preparation-retaining material is air-permeable;

wherein the preparation-retaining material is fixed at least one location in the air passageway created by the fan; and

releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the sixth auxiliary request is identical to claim 1 of the fifth auxiliary request.

Claim 1 of the seventh auxiliary request read as follows:

"1. An insect pest control method which comprises: supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, to prepare a preparation-retaining material;

setting the preparation-retaining material in which the carrier is air-permeable; with an air permeability of not less than 0.1 l/sec;

wherein the preparation-retaining material is fixed at least one location in the air passageway created by the fan; and

releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the eighth auxiliary request read as follows:

"1. An insect pest control method which comprises: supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, to prepare a preparation-retaining material;

setting the preparation-retaining material in which the carrier is air-permeable; with an air permeability of not less than 0.1 l/sec;

wherein the preparation-retaining material is fixed at least one location in the air passageway created by the fan; and does not block an air current; and

releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests."

Claim 1 of the ninth auxiliary request read as follows:

"1. An insect pest control method which comprises: supporting on a carrier a preparation containing at least one pesticidal component selected from among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, to prepare a preparation-retaining material;

setting the preparation-retaining material in which the carrier is air-permeable; with an air permeability of not less than 0.1 l/sec;

wherein the preparation-retaining material is fixed at least one location in the air passageway created by the fan; and does not block an air current; and

releasing the pesticidal component from the preparation-retaining material into the air under non-heating conditions to control insect pests, wherein the carrier has a honeycomb structure, structure like a ventilation blind, a lattice structure or a network structure."

Claims 1 of the tenth and eleventh auxiliary requests are respectively identical to claims 1 of the first and second auxiliary requests submitted before the opposition division (see point II above)

VI. With a letter of 15 November 2006, the patentee filed two further sets of claims as twelfth and thirteenth auxiliary requests. Claim 1 of the twelfth auxiliary request is identical to claim 1 of the third auxiliary request maintained by the opposition division (see point II above).

Claim 1 of the thirteenth auxiliary requests read as follows:

"1. An insect pest control apparatus which comprises a main body having a ventilation means leading to a vent hole and a preparation-retaining material comprising a preparation supported on a carrier set at one or more locations within the ventilation means;

wherein the preparation-retaining material contains at least one pesticidal component selected among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, and an air current raised by a fan at the vent hole contacts the preparation-retaining material set in the ventilation means to release the pesticidal component under non-heating conditions;

wherein the vent holes includes an air intake and a vapor outlet;

wherein the preparation-retaining material is set in the air intake or the vapor outlet inside of the fan."

VII. With the statement of grounds of appeal, the opponent submitted further documents *inter alia*:

- (4) JP-A-02-282309 and a partial English translation
- (7) JP-A-05-032509 and a partial English translation

VIII. At the beginning of the oral proceedings which took place on 3 December 2008, the board reminded the parties that:

"the purpose of the appeal procedure in *inter partes* cases is mainly to give the losing party the possibility of challenging the decision of the opposition division on its merits. A patentee who has lost before the opposition division thus has the right to have the rejected requests reconsidered by the appeal board." Decision G 9/91, paragraph 18 and T 840/93, paragraph 3.1 were cited in this respect.

Main request and the auxiliary requests tenth to twelfth were to be examined first.

IX. The patentee filed a fourteenth auxiliary request during the oral proceedings before the board.

Claim 1 of the fourteen auxiliary request read as follows:

"1. An insect pest control apparatus which comprises a main body having a ventilation means leading to a vent hole and a preparation-retaining material comprising a preparation supported on a carrier set at one or more locations within the ventilation means;

wherein the preparation-retaining material contains at least one pesticidal component selected among compounds having a vapor pressure of from  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C, and an air current raised by a fan at the vent hole is applied to and passed through the preparation-retaining material set in the ventilation means to release the pesticidal component under non-heating conditions;

wherein the vent holes includes an air intake and a vapor outlet;

wherein the preparation-retaining material is set in the air intake or the vapor outlet side of the fan, wherein said pesticidal component is selected from the group consisting of 1-ethynyl-2-methyl-2-pentenyl dl-cis/trans-3-(2,2-dimethylvinyl)-2,2-dimethyl-1-cyclopropanecarboxylate, (5-benzyl-3-furyl)methyl d-cis/trans-chrysanthemate, d-3-allyl-2-methyl-4-oxo-2-

cyclopentenyl d-trans-chrysanthemate, 5-propargyl-2-furylmethyl d-cis/trans-chrysanthemate, (+)-2-methyl-4-oxo-3-(2-propynyl)-2-cyclopentenyl (+)-cis/trans-chrysanthemate, dl-3-allyl-2-methyl-4-oxo-2-cyclopentenyl dl-cis/trans-2,2,3,3-tetramethylcyclopropanecarboxylate, and/or isomers thereof, and/or analogues thereof."

X. The patentee argued as follows:

- the expression "...is applied to and passed into.." did not contravene the requirements of Article 100 c) EPC, because this formulation represented an alternative formulation without changing the technical character. He referred to page 6, lines 1 to 5 and pages 19, lines 12 to 14 of the description as originally filed. The expression "passed into" was obvious in view of the fact that the carrier is air-permeable (see page 20, lines 1 to 3 and page 27, line 24 of the description as originally filed). He also referred to Figure 5 in conjunction with page 10, line 22 to page 11, line 3.
- document (7) did not disclose all the features of claim 1 of the tenth and eleventh auxiliary requests.
- regarding inventive step of claim 1 of the twelfth auxiliary request, the technical problem to be solved in view of document (3) might be seen in the provision of an apparatus which distributes pesticides from a preparation-retaining material using an air current, said pesticides being hard

to volatilize, in a safe manner due to the absence of heating. The person skilled in the art would not arrive at the claimed subject-matter starting from document (3) as the closest prior art, because no specific insecticide was disclosed therein; this document focusing on the apparatus itself, without giving any further indication concerning the product to be used in it. The person skilled in the art would have first to select insecticides from the list of suitable compounds and to select a specific range of vapor pressure as recited in claim 1. Document (1) focused on the diffusion of volatile compounds retained on the air generating device. Furthermore, document (1) mentioned heating conditions to increase the effectiveness of the chemicals. Even, if the person skilled in the art would combine documents (3) and (1), the same skilled person would apply heating for the range of pesticides recited in claim 1. Moreover, the person skilled in the art would not combine the disclosures of document (3) with one of the documents (4) to (8), because his first choice would be the pesticides, which are easy to volatilize. He would rather as first choice select volatile pesticides.

- regarding inventive step of claim 1 of the fourteenth auxiliary request, the person skilled in the art would not consider the pesticides of document (4), because this compound is hard to volatilize. Moreover, document (4) described other means to create air current and there is no link in document (4) between the apparatus used therein and the one defined in claim 1, in particular



document (4) does not mention the use of a housing for the fan as in the apparatus of the present claimed subject-matter.

XI. The opponent submitted the following arguments:

- the main request contravened the requirements of Article 100 (c) EPC, because the word "contact" present in the application as originally filed has a different meaning than the expression "passed into".
- claim 1 of the twelfth auxiliary request contravened the requirements of Article 123(3) EPC, because the replacement of the wording "air current raised by a fan is applied to and passed into the preparation-retaining material" with "air current raised by the fan is applied to and passed through the preparation-retaining material" represented an extension of the scope of the patent as granted.
- claim 1 of the first to eleventh auxiliary requests were not novel on the basis of the disclosures of documents (4) to (7).
- regarding inventive step, the claims of the main request and auxiliary requests were obvious by combining either documents (1) with (3) or one of the documents (4) or (7).

XII. The patent proprietor requested that the decision under appeal be set aside and the patent maintained on the basis of either:

- the main request or
- one of the auxiliary requests 1 to 11, all submitted with the statement of grounds of appeal or
- auxiliary requests 12 or 13 submitted with the letter of 15 November 2006 or
- Auxiliary request 14 submitted during oral proceedings.

XIII. The opponent requested that the decision under appeal be set aside and that the patent in suit be revoked.

XIV. At the end of the oral proceedings, the decision of the board was announced.

## **Reasons for the Decision**

1. The appeal is admissible.

2. *Formal matters*

2.1 *Power-Point® presentation*

2.1.1 The opponent wished to make a Power-Point® presentation as announced in his letter of 25<sup>th</sup> November 2008. He, however, did not provide either the board or the patentee with a copy of the slides he intended to present.

2.1.2 A Power-Point® presentation made during oral proceedings is regarded as being substantially a written presentation of information and provides a party with

further written documents to develop its argument. It can therefore be considered as new evidence which is submitted late and can thus take the other party by surprise. The introduction of a late filed document is governed by the RPBA, which gives the board the possibility not to admit a late filed document into the procedure (see Article 13(1) RPBA).

2.1.3 Therefore, due to this late submission and the non-provision of any paper copy of the Power-Point® presentation to the board and the other party, the board exercises its discretion and does not admit this presentation into the procedure.

### 3. *Main request*

#### 3.1 *Added matter*

3.1.1 Article 100 c) EPC recites that an opposition may be filed if the subject-matter of a European patent extends beyond the content of the application as filed.

3.1.2 Claim 1 as originally filed contains the word "contacts", which was replaced by the expression "is applied to and passed into" in claim 1 as granted.

3.1.3 The patentee pointed out different passages of the description as a basis for the objected to amendment. On page 19 of the application as filed, he referred to the passage reciting that the preparation-retaining material of the invention has good ventilation and does not block the air current. A further passage was cited indicating a specific air permeability of the carrier (see page 20, lines 1 to 3).

In the passage on page 19 of the application as filed it is mentioned that the air-permeable carrier must be located so that it does not block the air current. He finally referred to the objects 30 and 31 of Figure 5, which represent the preparation-retaining materials.

3.1.4 However, these arguments cannot convince the board, because the expression "passed into" is not equivalent to the originally mentioned word "contacts". The latter does not require that the air enters into the preparation-retaining material. Moreover, the expression "passed into" does not also imply that the air current comes out of the preparation-retaining material. The passages of the description cited by the patentee cannot remove this objection, since the cited passages rather relate to an air current coming into the preparation-retaining material and coming out of it. Likewise, the part of the description reciting that "the carrier to be used usually has such ventilation as has an air permeability of not less than 0.1 l/sec" (see page 20, lines 1 to 3) cannot represent a true counterpart for the disputed feature of claim 1, since the preparation-retaining material is not limited accordingly. Moreover, Figure 2, which does not specify that the air passes into the preparation-retaining material, cannot provide support for this amendment. Figure 5, showing a specific preparation-retaining material, cannot thus be generalized to any preparation-retaining material as considered in claim 1.

3.1.5 Therefore, claim 1 of the main request contravenes the requirements of Article 123(2) EPC.

3.2 Since the board can only decide on a request as a whole, the main request is rejected.

4. *Auxiliary request 1-9*

4.1 *Admissibility*

4.1.1 The first to ninth auxiliary requests were not admitted into the proceedings as they were not clearly allowable as they did not overcome the objections which led the board to reject the main request.

4.1.2 The purpose of the appeal procedure in *inter partes* cases is mainly to give the losing party the possibility of challenging the decision of the opposition division on its merits. A patentee who has lost before the opposition division thus has the right to have the rejected requests reconsidered by the appeal board (see G 9/91 paragraph 18 and T 840/93 paragraph 3.1).

If the patentee wants other requests to be considered, the admission of these requests into the proceedings is a matter of discretion for the appeal board. The board may consider in that respect whether the requests are clearly allowable in the sense that the requirements of Article 123 (2) and (3), of Article 84 and also preferably of Article 54 are clearly met by the new requests. In addition, such requests should also be *bona fide* attempts to overcome the objections raised.

In this case only the patentee's main request and tenth to twelfth auxiliary requests have been considered by the opposition division. The opposition division

rejected the main request and auxiliary requests 10 and 11. The patentee has submitted before the board auxiliary requests 1 to 9 and 13 which were not subject to a decision of the opposition division.

#### 4.1.3 *First, fourth auxiliary requests*

In each claim 1 of these requests, the expression in the granted claim 1 "...is applied to and passed into.." characterizing the air current on the preparation-retaining material has been replaced by the word "contacts". The word "contacts" has a meaning which is broader than the expression "...is applied to and passed into..", since it embraces also the possibility for the air current to flow by the preparation-retaining material without going into it. Hence, this amendment extends the scope of the granted patent contrary to the requirements of Article 123(3) EPC.

Consequently, these requests are not admitted into the procedure, since they are not clearly allowable.

#### 4.1.4 *Second auxiliary request*

Due to the expression "...is applied to and passed into..", this request suffers from the same deficiencies as claim 1 of the main request (see point 3.1 above)

Consequently, this request is not clearly allowable and is not admitted in the procedure.

4.1.5 Third, fifth to ninth auxiliary requests

Claim 1 of these requests differ from claim 1 of the eleventh request in that the feature "is applied to and passed into" was replaced by a feature referring to the "air permeable" character of the preparation-retaining material. In the third, fifth and sixth auxiliary requests, the preparation-retaining material is air permeable and in the seventh, eighth and ninth auxiliary requests this air permeable material has an air permeability of not less than 0.1 l/sec. The properties of the air permeable material cannot distinguish it from the honeycomb like carrier described in document (7) (see points 6.1.2). Therefore, for the same reasons which have led to the conclusion that claim 1 of the eleventh auxiliary request lacked novelty, claims 1 of these requests also lack novelty. Since they do not overcome the objections previously discussed, they are not admitted into the procedure.

5. *Auxiliary request 10*

5.1 *Added matter*

5.1.1 Claim 1 differs from claim 1 as granted in that the expression "passed into" was replaced by the expression "passed through".

5.1.2 The opponent argued that the replacement of the expression "passed into" by the expression "passed through" amounts to an extension of the protection conferred by the granted version of the patent.

5.1.3 The board cannot share this view. The expression "passed through" means that the air current enters into the preparation-retaining material and comes out of it, whereas the expression "passed into" encompasses two possibilities, namely the air comes out or remains in the preparation-retaining material. The replacement of "passed into" by "passed through" represents, therefore, a restriction of the granted claimed scope.

5.1.4 Claim 1 and the subject-matter of the dependent claims fulfil the requirements of Article 123(3) EPC. No objection was raised on the basis of Article 123(2) EPC. The board is also satisfied that the requirements of this article are also met by this request.

## 6. Novelty

### 6.1 Document (7)

6.1.1 Document (7) (see column 10, example 14) describes a "pulp made honeycomb like" carrier impregnated with a mixture containing 95 (v/v% of an organic solvent and 3 (v/v)% of compound (1), which is the (+)1R,3S-trans-2,2-dimethyl-3-(2,2-dichlorovinyl)-cyclopropanecarboxylic acid 2,3,5,6-tetrafluorobentyl (generic name: benfluthrin) (see column 8, lines 11 to 15 of document (7)) to prepare a wind volatilizing acaricidal composition capable of volatilizing when a wind is applied to it from an air blower (see column 8, lines 11-15 and column 10, lines 27-31).

6.1.2 The patentee submitted that this document does not disclose any drawings and thus does not give any hint as to what the blowing apparatus looks like and that it



is not excluded that the pesticide is located on the blades of the air blower.

Benfluthrin is a compound falling within the scope of the insecticides mentioned in claim 1 (see page 6, line 58 of the patent in suit). According to the patent in suit, the carrier may have a honeycomb like structure and has an air permeability of not less than 0.1 l/sec, similar to that sheet of paper or a pulp (see page 19, lines 21 to 23, page 20, lines 1-2 and 6). A pulp made honeycomb like carrier as disclosed in document (7) has, therefore, the same characteristics and falls also within the definition of the carrier of claim 1.

An air current raised by a fan applied to and passed through the preparation-retaining material as defined in claim 1 cannot be distinguished from a wind applied to the impregnated carrier from an air blower as disclosed in document (7). Moreover, heating is not mentioned in example 10 of document (7).

6.2 In the absence of any distinguishing technical feature between example 10 of document (7) and the subject-matter of claim 1, the latter lacks novelty in the sense of Article 54(2) EPC.

6.3 Since the board can only decide on a request as a whole, the tenth auxiliary request is rejected.

7. *Auxiliary request 11*

*Novelty*

In view of the conclusions of the board regarding the auxiliary request 10, the added feature, "wherein the preparation-retaining material is set in an air passageway fixed at at least one position in the air passageway" does not confer novelty to claim 1 of auxiliary request 11. This is because from example 10 of document (7), it is unambiguous that the carrier (e.g. preparation-retaining material) is submitted to a wind produced by an air blower, that is to say, is set in an air passageway.

For this reason, claim 1 lacks novelty over document (7).

8. *Auxiliary request 12*

8.1 The opponent maintained his objections raised for auxiliary request 10 concerning the added matter and the reproducibility of the invention.

Claim 1 is now no longer a process claim but a claim describing an apparatus. The board, however, concurs with the parties to acknowledge that this request fulfils the requirements of Articles 83 and 123(3) EPC.

8.2 *Novelty*

8.2.1 The board does not consider the disclosure of (7) as novelty-destroying, because the apparatus, subject-matter of claim 1, requires the use of a fan. This

feature is not present in example 14 of document (7). Hence, the claimed subject-matter fulfils the requirements of Article 54 EPC.

### 8.3 *Inventive step*

8.3.1 According to the established jurisprudence of the boards of appeal, it is necessary, in order to assess inventive step, to identify the closest prior 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 the assessment of inventive step on an objective basis and avoids an ex post facto analysis.

8.3.2 The closest prior art is a prior art document disclosing subject-matter aiming at the same objectives as the claimed invention and having the most relevant technical features in common, i.e. requiring the minimum of structural modifications (see Case Law of the Boards of Appeal of the EPO, 5<sup>th</sup> edition 2006, Section I.D.3.1., "Determination of the closest prior art in general", page 121).

8.3.3 The board, in agreement with the parties, considers that document (3) represents the closest prior art, since it also describes an apparatus (see Figure 2) equipped with a main body (12) and a ventilation means (34, a fan). Vent holes are represented by (20) for the air intake and (21) for the vapor outlet. The cartridge of Figure 1 of document (3) in which the pesticide is supported and which is located in the vapor outlet of

the fan (see Figure 2 of document (3)). In view of the Figure 1 of document (3), it is clear and undisputed that the air current passes through the preparation-retaining material (cartridge). Moreover, column 1, lines 14 to 15, describes that insecticides can be distributed by the described apparatus. Therefore, the only difference between the subject-matter of document (3) and the one of the patent in suit lies in the use of specific pesticides having vapor pressure values comprised between  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C in the patent in suit.

- 8.4 Hence, the problem underlying the patent in suit can be seen in the provision of an apparatus which can distribute pesticides from a preparation-retaining material using an air current, said pesticides being hard to volatize, and such volatizing being carried out in a safe manner due to the absence of heating.
- 8.5 The solution proposed by the invention is represented by the apparatus described in claim 1, which is characterized by the use of a specific type of pesticide to be vaporized under non-heating conditions.
- 8.5.1 The patentee did not provide any evidence of an improvement vis-à-vis document (3). There is nothing in document (3) indicating that the apparatus is restricted to easy to volatize pesticides as opposed to the claimed apparatus adapted to hard to volatize pesticides. Claim 1 of the patent in suit also does not show a safer way of volatizing, that is without heating, compared to the apparatus of document (3), since this apparatus does not comprise any heating device. Thus, for the characteristics of pesticide volatility and the

safety (non-heating method) of the volatilizing method, there is no improvement shown in the patent in suit compared to document (3).

8.5.2 The technical problem to be solved by the claimed subject-matter can therefore only be seen in the provision of an alternative apparatus to volatilize pesticides impregnated on a carrier.

8.6 The next issue, therefore, is whether the available state of the art allows the person skilled in the art to arrive at the claimed invention

8.6.1 The apparatus described in document (3) (see point 8.3.3 above) differs only from the claimed apparatus in the patent in suit in that a pesticide having vapor pressure values within the range  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C is present on the carrier in the patent in suit. Among the different documents of the prior art available to him, the person skilled in the art would learn from document (7) (see column 10, example 14) that the use of benfluthrin, also mentioned in the patent in suit and thus having a vapor pressure value falling within the range of claim 1 (see example 4, page 45, No. 4 of the description as originally filed), impregnated on a carrier and which can be volatilized by the application of wind. The person skilled in the art, seeking an alternative apparatus to vaporise pesticide, would therefore consider using the compound of document (7) in the apparatus of document (3) and thereby arrive at the claimed invention.

8.6.2 The patentee mainly argued that the person skilled in the art would not consider the pesticide of document (7), because this compound is hard to volatize. The person skilled in the art would rather, as a first choice, select volatile pesticides.

8.6.3 The board does not concur with this opinion, because the fact that benfluthrin is hard to volatize does not prevent its vaporisation under blowing conditions and without heating as described in document (7). Moreover, if as asserted by the patentee, the skilled person would first select volatile compounds, this does not prevent him from also selecting less volatile compounds as taught in document (7). Finally, document (7) does not mention the absence of heating in example 14; however, the person skilled in the art, would try first to reproduce the invention in the absence of any heating, since the apparatus of document (3) is not equipped with a heating system, and verify thereafter, whether any pesticidal effect has been achieved.

8.7 The board therefore concludes that auxiliary request 12 does not fulfil the requirements of Article 56 EPC.

9. *Auxiliary request 13*

The thirteenth auxiliary request was not admitted into the proceedings as it was not clearly allowable as it did not overcome the objections which led the board to reject the first auxiliary request. The patentee raised no objection in that respect. This issue is discussed under point 4.1.3 above.

10. *Auxiliary request 14*

10.1 it is not necessary to discuss the reasons, for admitting this late filed request in the light of the decision on inventive step below.

10.2 *Inventive step*

10.3 For the same reasons set out with regard to the twelfth auxiliary request, document (3) represents the closest prior art and the technical problem derived thereof can be seen in the provision of a further insect pest control apparatus having specific pesticides impregnated on a carrier.

10.4 On the basis of the examples of the description, the board is convinced that this problem has been solved by the claimed subject-matter.

10.5 It should thus be decided whether such a solution is obvious or not for the person skilled in the art.

10.5.1 Document (3) remains the closest prior art. The apparatus described in this document (see point 7.3.3) differs only from the claimed apparatus of the patent in suit in that pesticides having vapor pressure values within the range  $1.3 \times 10^{-5}$  Pa ( $1 \times 10^{-7}$  mmHg) to 0.2 Pa ( $1.5 \times 10^{-3}$  mmHg) at 30 °C are retained on the carrier. Among the different documents of the prior art available to him, the person skilled in the art would notice that document (4) describes the use of a specific pesticide (see column 14, i.e. "Empenthrin"), which has a vapor pressure falling within the range mentioned in claim 1, since it is also used in the

patent in suit (see claim 1 and page 6, lines 56-57 "1-ethynyl-2-methyl-2-pentenyl dl-cis/trans-3-(2,2-dimethylvinyl)-2,2-dimethyl-1-cyclopropanecarboxylate referred to as empethrin). Document (4) further teaches that the said compound is used under non-heating conditions and can be absorbed on a carrier and subsequently evaporated with air caused by a fan (see document (4), "constitution"). The board considers that no inventive step is required to use a pesticide described in document (4) in the apparatus described in document (3) and thus arrive at the subject-matter of claim 1 of the patent in suit.

10.5.2 The patentee mainly argued that the person skilled in the art would not consider the pesticide of document (4), because this compound is hard to volatize. The person skilled in the art would rather, as first choice, select volatile pesticides. Moreover, document (4) disclosed other means to create air current and there is no link in document (4) between the apparatus used therein and the one described in claim 1; in particular document (4) does not mention the use of a housing for the fan as in the apparatus of the present invention.

10.5.3 The fact that Empethrin is a hard to volatize product does not prevent its vaporisation under blowing conditions and without heating as taught in document (4). Moreover, if as asserted by the patentee, the person skilled in the art would first select volatile compounds, this does not prevent him from also selecting the less volatile pesticides as taught in document (4). It is true that the apparatus of claim 1 is not described in document (4), however, the person skilled in the art would consider document (3), which



describes an apparatus to vaporize insecticides in which an air current is generated by a fan as mentioned in document (4), since the person skilled in the art is only looking for an alternative apparatus able to vaporize pesticides.

10.6 The board therefore concludes that auxiliary request 14 does not fulfil the requirements of 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

M. Schalow

P. Ranguis