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**Datasheet for the decision  
of 11 February 2009**

**Case Number:** T 0514/06 - 3.2.03  
**Application Number:** 98204465.3  
**Publication Number:** 0931720  
**IPC:** E03F 1/00, B64D 11/02  
**Language of the proceedings:** EN

**Title of invention:**  
Galley vacuum waste disposal system

**Patentee:**  
The Boeing Company

**Opponent:**  
Airbus SAS

**Headword:**  
-

**Relevant legal provisions:**  
EPC R. 80  
EPC Art. 52, 54, 56, 84, 112(1), 123(2), 123(3)  
RPBA Art. 13

**Relevant legal provisions (EPC 1973):**  
EPC Art. 108  
EPC R. 64(b)

**Keyword:**  
-

**Decisions cited:**  
T 0089/85, T 0007/81, T 0049/99, T 0407/02, T 1075/02,  
T 1735/06, G 0002/88

**Catchword:**  
-



Case Number: T 0514/06 - 3.2.03

**DECISION**  
of the Technical Board of Appeal 3.2.03  
of 11 February 2009

**Appellant I:**  
(Patent Proprietor)

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**Decision under appeal:**

Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
28 December 2005 concerning maintenance of  
European patent No. 0931720 in amended form.

**Composition of the Board:**

**Chairman:** U. Krause  
**Members:** Y. Jest  
K. Garnett

## Summary of Facts and Submissions

- I. European patent No. 0931720 was granted on the basis of European patent application No. 98204465.3 filed on 29 December 1998 claiming priority from patent application US 13386 filed on 26 January 1998.

With decision dated 28 December 2005 the Opposition Division maintained the patent in amended form on the basis of the fifth auxiliary request. This request contained an amended set of dependent claims 2 to 9 and an amended page 2 of the patent specification.

The Opposition Division considered that these amendments fulfilled the requirements of Rule 57(a) EPC 1973 and found that the grounds of opposition based on Articles 123, 52(1) and 56 EPC did not prejudice the maintenance of the patent in such an amended form.

- II. Appeals were lodged against the interlocutory decision of the Opposition Division by the Proprietor of the patent (hereinafter Appellant I) and by the Opponent (hereinafter Appellant II) on 28 February 2006 and respectively on 6 March 2006. The respective appeal fees were paid on the same date. The Appellant I filed the statement of the grounds of appeal on 27 April 2006 and Appellant II on 5 May 2006.

- III. With a communication dated 17 April 2008 the Board summoned the parties to oral proceedings for 11 September 2008 and gave its provisional views on the issues on debate.

In response to a duly reasoned request of Appellant II and with the agreement of Appellant I, the oral proceedings were postponed to 11 February 2009.

IV. The prior art taken into consideration during the proceedings is as follows:

- D1: US-A- 4357719
- D2: US-A- 4376314
- D4: US-A- 5245711
- D5: US-A- 1343287

Documents D4 and D5, which had been submitted late in the opposition proceedings, were disregarded by the Opposition Division (Article 114(2) EPC).

V. At the close of the oral proceedings before the Board the Appellant I (Proprietor) made the following requests:

- (a) The decision under appeal be set aside and the patent be maintained as granted, alternatively;
- (b) The case be remitted to the Opposition Division;
- (c) The patent be maintained on the basis of the claims according to auxiliary requests I, I', II, II', II'', III, IV, IV', V, V', VI, VI', VII, VII', VIII, VIII', IX or IX' filed with letter dated 11 August 2008;
- (d) The following question be referred to the Enlarged Board of Appeal:

"Whether addition of one or more dependant claims, possibly in combination with an amendment of the independent claims these dependent claims refer to, where amendment of the main claim is occasioned by a ground of opposition." (sic)

VI. Wording of the relevant claims.

NB: *Amendments made to the text of granted claim 1 shown in bold character.*

(i) Claim 1 of main request

"A galley waste disposal system for use with an existing vacuum sewage waste storage tank of an existing sewage waste system, said waste storage tank being capable of being maintained under a partial vacuum, said galley waste disposal system comprising:

- an enclosure (3) for housing the system;
- a basin (7) located in the enclosure for receiving the waste material;
- a drain line (8) for coupling the basin to the waste storage tank;
- a flush valve (9) coupled to the drain line for allowing waste to be transported from the basin, through the drain line and into the storage tank;
- an air supply duct (16) to supply air to the enclosure during a flushing cycle."

(ii) Claim 1 of auxiliary requests I and I'

"A galley waste disposal system (...)

- an enclosure (3) **installable in the galley** and for housing the system;
- a basin (7) **for receiving the waste material and located in the enclosure;** (...)
- an air supply duct (16) to supply air to the enclosure during a flushing cycle."

(iii) Claim 1 of auxiliary requests II and II'

**"A sewage waste system on an airplane, comprising:**

- **a vacuum sewage waste storage tank**, said waste storage tank being capable of being maintained under partial vacuum;
- **one or more toilets connected to the waste storage tank**;
- a galley waste disposal system **connected to the storage tank**, said galley waste disposal system comprising:
  - an enclosure (3) **installable in the galley and** for housing the system;
  - a basin (7) located in the enclosure for receiving the waste material;
  - a drain line (8) for coupling the basin to the waste **water** storage tank;
  - a flush valve (9) coupled to the drain line for allowing waste **water** to be transported from the basin, through the drain line and into the storage tank;
  - an air supply duct (16) to supply air to the enclosure during a flushing cycle;
  - **an exhaust duct (17) coupled to the enclosure (3) for drawing air from the enclosure; and**
  - **tubing having a width of 5 cm (2 inch) to the waste storage tank for connecting the toilets and/or galley waste disposal system to the storage tank.**"

(iv) Claim 1 of auxiliary requests III and III'

**"An aircraft having a galley, said galley including:**

- galley waste disposal system for use with an existing vacuum sewage waste storage tank of an existing sewage waste system, said waste storage tank being capable of being maintained under a partial vacuum, said galley waste disposal system comprising:
  - an **acoustically insulated** enclosure (3)

**installed in the galley** and for housing the system;

- a basin (7) **for receiving the waste material and located in the enclosure;** (...)

- an air supply duct (16) to supply air **from an air source** to the enclosure during a flushing cycle."

(v) Claim 1 of auxiliary requests IV and IV'

**"An aircraft having a galley, said galley including:**

- a galley waste disposal system for use with an existing vacuum sewage waste storage tank of an existing sewage waste system, said waste storage tank being capable of being maintained under a partial vacuum, said galley waste disposal system comprising:

- an enclosure (3) **installed in the galley** and for housing the system; (...)

- an air supply duct (16) to supply air **from an air source** to the enclosure during a flushing cycle;  
**and**

- a door (4) **on said enclosure (3) for covering said basin during the flushing cycle.**"

(vi) Dependent claim 2 of auxiliary requests IV and IV'

"2. The aircraft of claim 1, further comprising:

- a flush control unit (10); ....."

(vii) Claim 1 of auxiliary requests V and V'

Claim 1 of auxiliary requests V and V' are identical to claim 1 of auxiliary requests IV and IV' and correspond to claim 1 of former auxiliary request V deemed to be allowable by the Opposition Division.

Auxiliary request V' differs from auxiliary request IV' only by a clarified wording of dependent claims 2 to 7 and 9 and by dependencies of the dependent claims conforming to those of the patent as granted.

(viii) Claim 1 of auxiliary requests VI and VI'

**"An aircraft having a galley, said galley including:**

- a galley waste disposal system for use with an existing vacuum sewage waste storage tank of an existing sewage waste system, said waste storage tank being capable of being maintained under a partial vacuum, said galley waste disposal system comprising:

- an enclosure (3) **installed in the galley** and for housing the system;

- a basin (7) located in the enclosure for receiving the waste material;

- a drain line (8) for coupling the basin to the waste storage tank;

- a flush valve (9) coupled to the drain line for allowing waste to be transported from the basin, through the drain line and into the storage tank;

- an air supply duct (16) to supply air **from an air source** to the enclosure during a flushing cycle;

- a door (4) on said enclosure (3) for covering said basin during the flushing cycle;

- an exhaust duct (17) coupled to the enclosure (3) for drawing air from the enclosure; and

- a check valve (18) mounted in the exhaust duct for preventing the backflow of air during a flush cycle."



(ix) Added dependent claims

The subject-matter of the two dependent claims, at least one of which being added in the set of claims of auxiliary requests I to IX, is defined by the following features:

- "wherein the galley enclosure is acoustically insulated"
- "wherein the galley enclosure is provided with a hinged door to provide access to the basin".

VII. Appellant I submitted essentially the following arguments:

(a) Formal issues

The statement in the notice of appeal filed by Appellant I, namely the request "to set aside the decision of the Opposition division and to revoke the patent", was clearly erroneous and its correction under Rule 88 EPC 1973 was obvious in the sense that the conjunction "and" had been wrongly inserted in what was intended to be the correct statement, namely "to set aside the decision to revoke the patent". The appeal was admissible taking into account such a correction.

Late submitted documents D4 and D5, since they were not more relevant than the state of the art already taken into consideration in the proceedings, should be disregarded by the Board according to Article 114(2) EPC.

In the event that the Board introduced D4 and/or D5 into the proceedings remittal of the case to the Opposition Division was appropriate because of the

right of the Proprietor to have this new issue examined by two levels (Article 111 EPC).

The auxiliary requests dated 1 and 11 August 2008 had been filed in response to the provisional opinion of the Board accompanying the summons to oral proceedings and should therefore be admitted into the procedure. The filing of additional dependent claims in auxiliary requests I, II, III, IV, IV', V and VI should be allowed where the respective independent claims had been amended during opposition or subsequent appeal proceedings. If these requests were rejected by the Board under Rule 80 EPC 2000, the question of admissibility of added dependent claims in the post-grant procedure should be referred to the Enlarged Board of Appeal.

The requirements of Articles 84 (clarity) and 123 EPC were met by the sets of claims of all the requests pending. The feature "installable in the galley" in auxiliary requests I', II', II'' was originally and clearly disclosed and meant that the dimensions of the enclosure were selected so that it could fit into a galley of an aircraft. In claim 1 of auxiliary requests II' and II'', directed to a sewage system including a galley waste disposal system, the term "system" in line 13 or 14 unambiguously related to the galley waste disposal system and not the sewage device.

The change of denomination of the claimed subject-matter from a galley waste disposal system into an aircraft comprising a galley equipped with such a system was a restriction of the invention as granted to a specific technical field. This was a limitation of

the scope of protection within the meaning of Article 123(3) EPC.

As to Appellant I's auxiliary requests III' and V', VI' and VII', when the Board indicated that auxiliary request III' was not a converging request with respect to the other three, Appellant I dropped auxiliary request III'.

In case the Board considered auxiliary requests III' and V', VI', VII' to follow two parallel and diverging concepts, auxiliary request III' would be dropped and substantial examination should be continued on the basis of auxiliary requests V', VI' and VII'.

(b) Main request

The waste disposal system of granted claim 1 was to be considered by the skilled person as being installed in the galley of an aircraft and not in the toilets as disclosed in D1. The claimed system was also distinguishable from D1 in that it comprised an air duct for supplying air into the enclosure, ie with compressed air available from the ventilation system of the aircraft and which was only supplied during a flushing cycle.

The claimed device was also new over D4 since this known construction was a so-called grey water system which reused water from basin to flush toilets so as to save water. This prior art was not adapted to be transferred as such into a galley. It also lacked an air supply duct and an enclosure.

In this respect it was noted that the information contained in paragraph [0005] of the patent did not reflect the state of the art and could not be used as

such for addressing patentability of the claimed invention. In fact such behaviour by flight attendants was strictly forbidden by their employers, ie airlines. In the event that the Board considered the subject-matter of claim 1 to lack novelty, remittal of the case to the Opposition Division was requested prior to any decision.

(c) Auxiliary request V'

Document D4 could not represent the closest prior art because it referred to a water waste disposal system installed in toilets. It was not suitable to be transferred into a galley without significant modifications.

The invention differed from the closest prior art D1 in that the waste disposal system was contained in an enclosure located in the galley and comprised an air supply duct and a door or cover. Furthermore ambient air in toilets or in a galley could not be considered as being the air source from which air was supplied within the meaning of the invention.

The skilled person, who was an aircraft manufacturer, would not have been guided by D4 to provide the system of D1 with an air duct supplying air only during flushing cycles since the channels 352 allowing air to enter the toilet bowl in the embodiment of Figure 5 of D4 were permanently open. The problem of reducing or even preventing odours escaping into the galley would not be solved either by combining D1 with D4.

The device of claim 1 of auxiliary request V' was thus new and involved an inventive step.

(d) Auxiliary request VI'

Claim 1 was based on claim 1 of auxiliary request V' but comprised additional features directed to the exhaust duct including a check valve connecting the enclosure to the ventilation system of the aircraft. No cited prior art disclosed such an exhaust conduit, which allowed the foul-smelling air and waste odours concentrating in the enclosure of the waste disposal system to be withdrawn.

The device of claim 1 of auxiliary request VI' was thus new and involved an inventive step.

VIII. At the close of the oral proceedings before the Board Appellant II (Opponent) made the following requests:

- (a) The decision under appeal be set aside and European patent No.0931720 be revoked;
- (b) The appeal of the Proprietor be ruled inadmissible.

The arguments of Appellant II can be summarised as follows:

- The Proprietor's appeal was not admissible under Article 108 and Rule 64(b) EPC 1973 because the grounds of appeal filed with letter of 28 April 2006 and requesting maintenance of the patent did not support the appeal as originally defined in the notice, namely to "set aside the decision of the Opposition Division and to revoke the patent". Furthermore the request for correction of the statement of appeal filed with the Proprietor's letter of 17 August 2006 should be rejected because it was late filed.

- Late submitted documents D4 and D5 were relevant and should therefore be taken into consideration in the appeal proceedings.

- The requests in which dependent claims had been added were not admissible in view of Rule 57a EPC 1973 (Rule 80 EPC 2000) and Rule 58(2) EPC 1973 (Rule 81 EPC 2000).

- The following feature:

"a door (4) on said enclosure (3) for covering said basin during the flushing cycle",

when added in claim 1 of auxiliary requests IV and IV', was a generalisation of the embodiment defined by dependent claim 6 as granted and thus added fresh subject-matter (Article 123(2) EPC).

- The subject-matter of granted claim 1 lacked novelty over D1 and D4 since these known toilet systems were adapted to be used for the disposal of galley waste.

- The change of object between a waste disposal system in claim 1 as granted and an aircraft in auxiliary requests III and IV introduced an extension of the scope of protection within the meaning of Article 123(3) EPC.

- Auxiliary requests I', II' and II'' contravened Articles 84 and 123(2) EPC because:

(a) the feature relating to the enclosure "installable in the galley" was not clear and introduced fresh subject-matter;

- (b) it was unclear to which system (galley or sewage) claim 1 of auxiliary request II' and II'' referred to by term "system" in line 13 of claim 1;
- (c) claim 1 of auxiliary requests II' and II'' lacked support in the originally filed documents for its new feature defining a waste "water" storage tank as compared to the more general waste storage tank in claim 1 as granted.

- The subject-matter of claim 1 of auxiliary requests V' and VI' lacked inventive step (Article 56 EPC) since it was obviously derivable from the state of the art including D1, D4, D2 and common general knowledge, as made clear in the patent itself at paragraph [0005]. The person skilled in the art would have duplicated the waste collecting device installed in toilets (D1 and D4) to provide the same apparatus in the galley. This step was obvious because it reconciled the advantage of disposing of waste in a vacuum system with the obligation of the flight attendants not to throw galley waste into the toilets. The provision of an exhaust duct comprising a check valve would be immediately obvious as soon as the skilled person contemplated how to avoid the escape of odours from the enclosure of the waste system into the galley atmosphere. This would constitute normal practice for the skilled person, who would be a plumber, that is, a technician dealing with plumbing installations both in toilets and in the galley of an aircraft.

IX. The Board announced its decisions at the end of the oral proceedings of 11 February 2009.

## Reasons for the Decision

### 1. Admissibility of the appeals.

1.1 The appeals were lodged in the first quarter of 2006 prior to the entry in force of the EPC 2000 (13 December 2007) so that the provisions of Articles 106 to 108 EPC 1973 and of Rules 1(1) and 64 EPC 1973 apply as regards the admissibility of an appeal.

Rule 64(b) EPC 1973 requires the notice of appeal to contain "a statement indentifying the decision which is impugned and the extent to which amendment or cancellation of the decision is requested".

1.2 In the notice of appeal filed by the Proprietor (Appellant I) by fax on 28 February 2006, the statement (A) reading:

"[Appellant I] gives notice of appeal against the decision of the Opposition Division dated 28 December 2005 maintaining the patent mentioned above in amended form"

identifies the decision which is impugned, so that the notice of appeal meets the first requirement of Rule 64(b) EPC 1973.

The notice of appeal contains the following further sentence (B):

"It is requested to set aside the decision of the Opposition Division and to revoke the patent."

In the Board's judgement the proper interpretation of this sentence when construed in the light of the history of the proceedings is as follows:



- the first part (B1), namely "to set aside the decision", constitutes a statement identifying the extent to which amendment of the decision is requested within the meaning of Rule 64(b) EPC 1973, i.e. its cancellation in its entirety;
- the second part of the sentence ((B2): "to revoke the patent") is not to be regarded as a statement of the extent to which amendment or cancellation of the decision is requested within the meaning of Rule 64(b) but as an additional statement identifying the form of order which the Proprietor was requesting following on from the cancellation of the decision under appeal. As such, it belonged more properly to the grounds of appeal.

The Board does not in fact accept the Proprietor's submission that it was obvious that the word "and" had been missed out, so that the request should have been understood as being a request "to set aside the decision to revoke the patent." This is because the Opposition Division had not in fact revoked the patent. However, this does not matter; nor does that the fact that the request in the notice of appeal for "revocation of the patent" may have been regarded, at the very least, as curious. The inclusion of statement (B2) did not limit the Proprietor and did not preclude the submission of different requests at a later stage, for instance together with the filing of appeal grounds. In fact, with letter dated 27 April 2006 grounds of appeal were filed by the Proprietor. These requested maintenance of the patent as granted or in an amended form according to one of four auxiliary requests, all requiring the impugned decision to be set aside.

The Board reaches the above conclusion having regard to the jurisprudence of the Boards of Appeal according to which the requirements of Rule 64(b) EPC 1973 are to be regarded as formal in nature, and also that the notice of appeal is to be construed objectively in the light of what has taken place in the proceedings to date. See T 7/81 (OJ 3/1983, page 98) and T 89/85. Further, while the notice of appeal must specify whether the decision is requested to be set aside in whole or in part, or amended, in the case of an appeal by an applicant or patentee, the precise form in which the patent is requested to be granted or maintained is for the grounds of appeal. See T 49/99, T 407/02, T 1075/02 and T 1735/06.

It is therefore the Board's conclusion that the notice of appeal filed by the Proprietor and including statements (A) and (B1) above satisfied both Article 108 and Rule 64(b) EPC 1973.

- 1.3 The suggestion raised Appellant I that its notice of appeal could be corrected thus became obsolete.
- 1.4 The admissibility of the appeal of the Opponent (Appellant II) was not disputed.
- 1.5 The appeal of both the Opponent and the Proprietor are therefore admissible.

## 2. *Late filed submissions*

- 2.1 Both documents D4 and D5 were cited in the opposition proceedings after the opposition time limit of nine months and were disregarded by the Opposition division.

2.1.1 The Board considers in the present case that the Opposition Division did not correctly apply its discretion not to admit D4 into the proceedings. Document D4 was at least prima facie relevant since it showed more features of claim 1 as maintained than did document D1, considered in the impugned decision as disclosing the closest state of the art. A more detailed analysis and comparison with the claimed subject-matter of the patent as amended and intended to be maintained would have been necessary, even though the decision might not have had to be changed.

The Board, taking the view that the content of document D4 could be more relevant than the closest prior art as identified in the impugned decision, decided to admit D4 into the proceedings under the provisions of Article 114(1) EPC.

2.1.2 As regards prior art document D5, it has been cited to show that the features of dependent claim 5 as granted were known per se and could therefore not add anything inventive to the device of claim 1. The late submission of D5 was thus not in response to a new request filed by the Proprietor. Furthermore D5 relates to very old art in the field of chemical toilets, a field which is prima facie quite distant from vacuum disposal and storage devices in aircrafts. The Board thus concludes that the way the Opposition Division applied its discretion with respect to D5 was correct and that this late filed document should not be part of the proceedings.

2.2 Claim 1 of auxiliary requests VIII, VIII', IX, IX', X and XI contains features which were not the subject of any granted dependent claims but have been directly taken from description. These requests were filed with letters dated 1 and 11 August 2008 thus more than two years after the filing of the appeals.

The Board considers the auxiliary requests VIII, VIII', IX, IX', X and XI inadmissible in the light of Rule 13(3) RPBA.

3. *Rule 80 EPC 2000 - Referral (Article 112 EPC)*

3.1 Rule 80 EPC 2000

3.1.1 The set of claims of each of the auxiliary requests I, II, III, IV, V, VI and VII contains at least one additional dependent claim directed to one of the following features taken from the description:

- "wherein the galley enclosure is acoustically insulated";
- "wherein the galley enclosure is provided with a hinged door to provide access to the basin".

It has been the constant and uniform jurisprudence (see "Case Law of the Boards of Appeal of the European Patent Office", 5th edition 2006, VII.C.6.1.3, pages 571 and 572, relating to the corresponding Rule 57(a) EPC 1973) that the addition of new dependent claims in opposition or subsequent appeal proceedings, independently of whether the relevant independent claim has been amended, is neither appropriate nor necessary to meet a ground of opposition and in particular an objection against the patentability of the subject-matter claimed, and cannot therefore be occasioned by any ground of opposition, as required by Rule 80 EPC.

The Board sees no reason to depart from that jurisprudence in the present circumstances and considers therefore that all the auxiliary requests comprising at least one dependent claim added after the grant of the patent infringe the requirements of Rule 80 EPC 2000 and are thus unallowable.

3.1.2 In auxiliary request IV' the dependency on previous claims of some of the dependent claims has been changed and extended as compared to their dependency as granted. Thereby new combinations of claims have been introduced into the set of claims as granted which is equivalent to an addition of dependent claims. The objection under Rule 80 EPC 2000 raised above applies therefore also to auxiliary request IV'.

3.2 Referral to the Enlarged Board of Appeal

At the end of oral proceedings the representative of Appellant I stated that he wished a question to be referred to the Enlarged Board of Appeal in accordance with the terms of the request to this effect in Appellant I's letter dated 1 August 2008. The minutes of the oral proceedings record precisely the terms of this request in this letter, which were as follows:

"... whether addition of one or more dependent claims, possibly in combination with an amendment of the independent claim these dependent claims refer to, where the amendment of the main claim is occasioned by a ground of opposition"

This formulation obviously contains a mistake, hence the use of the word "sic" in the minutes. The Board

nevertheless takes the request as being to refer the question whether the addition of one or more dependent claims is allowable, possibly in combination with an amendment of the independent claim these dependent claims refer to, where the amendment of the main claim is occasioned by a ground of opposition.

Article 112 EPC provides that

"(1) In order to ensure uniform application of the law, or if a point of law of fundamental importance arises:

(a) the Board of Appeal shall, during proceedings on a case and ... following a request from a party to the appeal, refer any question to the Enlarged Board of Appeal if it considers that a decision is required for the above purposes."

In coming to the conclusion to refuse the addition of dependent claims in auxiliary requests I to IX the Board was acting in line with the uniform and constant jurisprudence as discussed above. By doing so the Board in fact avoided a non-uniform application of the law. As to whether a point of fundamental importance within the meaning of Article 112(1) EPC arises, the Board considers that since the existing jurisprudence of the Boards of Appeal is settled, and has not been demonstrated to be open to any real doubt as to its correctness, no point of fundamental importance arises which needs to be referred in order to decide this case. Appellant I's request for referral of a question to the Enlarged Board of Appeal is therefore rejected (Article 112(1)a) EPC).

4. *Article 84 EPC - Article 123(2) EPC*

4.1 The feature relating to the enclosure, namely "installable in the galley", added in claim 1 of auxiliary requests I', II' and II'', is not clear and may even introduce fresh subject-matter.

The Board shares the doubts of Appellant II in this respect.

First, the qualifying term "installable" refers to a result to be achieved rather than a concrete feature which limits the subject-matter further over the cited prior art.

Second, the added feature could be construed as meaning that the enclosure is a self-supported and pre-assembled kit construction which could be installed as such in a galley. However, this is disclosed neither in the patent nor in the originally filed application. Appellant I referred to column 2, lines 53 to 57 of the patent to demonstrate that the term "installable" was explicitly disclosed; however this passage merely indicates that the sizing of the enclosure of the galley waste system should be chosen so as to "minimize the impact of installation", for example with envelope dimensions corresponding to a standard galley waste storage cart.

This disclosure is substantially different from the vague and indefinite expression "installable in the galley" and cannot serve as support for this added feature.

4.2 Furthermore, since claim 1 of auxiliary request II' and II'' is now directed to a sewage system including a galley waste disposal system, it is unclear (Article 84 EPC) which system (galley or sewage) is

being referred to by term "system" in line 13 of claim 1.

4.3 Finally, claim 1 of auxiliary requests II' and II'' refers now to a waste "water" storage tank as compared to the more general waste storage tank in claim 1 as granted. There is no support and no disclosure in the application as filed for any waste "water" storage tank, so that the addition of "water" in this feature infringes the requirements of Article 123(2) EPC.

4.4 Thus auxiliary requests I', II' and II'' do not meet the requirements of Articles 84 and 123(2) EPC.

5. Requests formally admissible and formally allowable

As a result of the above, there remain for further examination the following requests:

- main request (MR) and
- auxiliary requests III', V', VI' and VII'.

5.1 Appellant II raised the objection that the change of subject-matter defined in claim 1 of auxiliary requests III', V', VI' and VII', namely "an aircraft having a galley including a galley waste disposal system" instead of the galley waste disposal system alone as in granted claim 1 would extend the scope of protection in the meaning of Article 123(3) EPC. This was mainly due to the fact that an airplane was of course much more expensive and comprised a huge amount of components other than the galley or its waste disposal system.

When deciding upon admissibility of any amendment to the claims of a patent in opposition proceedings or in



subsequent appeal proceedings, what needs to be considered and decided is whether the subject-matter which is protected by the claims is thereby extended. Thereby national laws of the Contracting States in relation to infringement need not to be taken into account (see G 2/88, OJ 1990, page 93, item 3.3).

- 5.1.1 A first step consists in determining the protection conferred by the patent as granted.

It is generally accepted as a principle underlying the EPC that a patent which claims a physical entity per se confers absolute protection, namely protection not only for such physical entity but also for all uses or all physical activities (for instance the integration into a larger physical entity) of such entity (see "Case Law", 5th edition 2006, III.B.4, page 271, third paragraph).

Here, claim 1 was directed to a galley waste disposal system. The extent of protection conferred thus covered not only the product/apparatus itself but also its use or its application in various suitable technical fields, especially those explicitly mentioned in the patent. It is not disputed that the major field of application of the claimed invention relates to aircraft, and more precisely to their galleys: see for instance paragraph [0001] of the patent.

Therefore the set of claims as granted already conferred protection for the use and for the inclusion of the waste system in the galley of an aircraft, ie in other words for an aircraft having a galley including the waste disposal system.

5.1.2 The second question to be addressed is whether the newly claimed subject-matter was included within the scope of protection defined by the claims as granted. This issue concerns any revised or amended independent claim directed to an aircraft as defined in all the auxiliary requests from III onwards. The change from a waste disposal system to an aircraft including such a system confers less protection and is actually a limitation of the scope of protection initially conferred by the patent as granted. Indeed the galley waste disposal system by itself as well as all the applications or uses other than in an aircraft are now excluded from protection.

This limitation of scope of protection applies whether or not there was in the patent as granted a claim directed to the larger apparatus, namely the aircraft.

5.1.3 The requirements of Article 123(3) EPC are thus also met by auxiliary requests III', V', VI' and VII'

## 5.2 "Converging" auxiliary requests

As noted in paragraph VIIa, above, the Board indicated during the oral proceedings that it would not allow auxiliary requests not having "converging" definitions of the claimed subject-matter, ie successive requests which defined the same aspect of the invention with degrees of limitation going in diverging directions. In the present case, two different groups of requests were identified by the Board, namely auxiliary request III' on one hand and requests V', VI' and VII' on the other. The successive requests within each group converged but neither group could be said to be converging in relation to the other.

During oral proceedings Appellant I (Proprietor) therefore selected auxiliary requests V', VI' and VII' to be further examined, abandoning auxiliary request III'. (Although the minutes record that auxiliary request III' was maintained at the end of the oral proceedings, this is an error).

5.3 The remaining requests to be examined in substance are thus:

- **the main request (MR) and**
- **auxiliary requests V', VI' and VII'.**

6. Main request - Novelty

The wording of claim 1 is such that two alternative interpretations of the claimed invention are possible, namely either a system for disposing of galley waste or a waste disposal system suitable to be used in a galley.

In either case the subject-matter of claim 1 as granted is anticipated by D4 which shows a disposal system, namely a toilet system, connected to a sewage system and to a vacuum storage tank.

6.1 The system in D4 discloses all the technical features of the claimed system, see especially the abstract and figures 1 and 5 of D4. The state of the art according to D4 relates to an aircraft (column 12, lines 14-15) having a waste disposal system for use with a vacuum sewage waste storage tank (holding tank 10) of a sewage waste system, the waste storage tank 10 being maintained under a partial vacuum. The waste disposal system comprises an enclosure (external shroud 300,

figure 5, column 7, line 26) installed in the aircraft for housing the system and a basin (toilet bowl 2, column 2, line 52) located in the enclosure 300 for receiving the waste material.

The basin 2 is coupled to the waste storage tank 10 by a drain line (sewer pipe 8, column 2, line 57). The drain line 8 comprises a flush valve 6 (column 2, line 55). Waste is transported from the basin 2, through the drain line 8 and into the storage tank 10 (column 8, lines 43-57). Air is supplied to the enclosure during a flushing cycle (column 8, lines 43-57) and more specifically, due to the presence of a plurality of air supply ducts (air supply member 302 provided with bores 352), the enclosure is open to an air source constituting the cabin air .

In claim 1 as granted there is no particular limitation or definition of the type of air source required, so that ambient air present in the toilet cabin of an aircraft meets the definition of an air source perfectly well.

The system is further equipped with a door (cover 362, column 8, lines 23-24) on said enclosure 300 for covering said basin 2 during the flushing cycle (column 8, lines 40-57).

Furthermore it is generally acknowledged, see paragraph [0005] of the patent, that aircraft crews used to dispose of galley waste, and especially food waste, in the toilet system of the aircraft. In this context it is not disputed that the system of D4 can receive galley waste and is suitable to be used as such in practice. The fact that this practice was officially forbidden by air companies because it presented an

undesirable image to aircraft passengers does not change or limit in any way this general knowledge.

The state of the art disclosed in D4, in conjunction with this known second use of the system for flushing galley waste matter down the toilets, though forbidden, thus anticipates the subject-matter of granted claim 1 according to the first interpretation of the claim, namely merely a system (*suitable*) for disposing galley waste.

- 6.2 But if alternatively claim 1 is interpreted as meaning a waste disposal system suitable to be used/located in a galley, its subject-matter is also be anticipated by D4.

The system of D4 is obviously perfectly suitable for receiving galley waste and could actually have been used as such in practice.

The system of D4, which is part of a self-standing module, can be installed in an aircraft as a unit (column 10, lines 39 to 48) and easily be relocated (column 10, lines 48 to 52). This unit is thus also perfectly suitable to be used/located in the galley cabin of the aircraft directly as such and without any relevant modifications.

7. *Auxiliary request V'*

- 7.1 Claim 1 of auxiliary request V' differs from claim 1 as granted by the added features shown in bold character:

**"An aircraft having a galley, said galley including:**

- a galley waste disposal system for use with an existing vacuum sewage waste storage tank of an

existing sewage waste system, said waste storage tank being capable of being maintained under a partial vacuum, said galley waste disposal system comprising:

- an enclosure (3) **installed in the galley** and for housing the system; (...)

- an air supply duct (16) to supply air **from an air source** to the enclosure during a flushing cycle; **and**

- a door (4) on said enclosure (3) for covering **said basin during the flushing cycle.**"

7.2 It was also general knowledge that aircraft crews used to flush galley waste down the toilets of aircraft, for instance toilet vacuum systems of the type disclosed in D4. This practice existed due to major advantages for the crew: for instance, they no longer had to deal with waste bags or conventional waste boxes since the waste was immediately sucked off to the vacuum waste storage tank, which tank was then serviced by another, specially allocated technical team on ground. Another immediate advantage of disposing galley waste and especially food waste down the toilet system was that it prevented the development of odours or unpleasant smells because it replaced conventional waste containers/bags stored in the galley for the duration of the flight.

However this practice has been forbidden by the airlines because it required the galley waste to be carried through areas of the aircraft which were unrestricted and freely accessible to the passengers, so that an unpleasant impression was left to the passengers.

Nevertheless the disposal of galley waste into an existing disposal system was comprised within the state of the art as disclosed in D4, and especially its embodiment of Figure 5.

This constitutes the closest prior art as compared to the invention.

7.3 The claimed subject-matter of auxiliary request V' differs in substance from this generally known state of the art in that a waste system similar to the existing one already provided in the aircraft toilets is installed in the galley of the aircraft.

The duplication of the waste system has the technical effect or advantage of keeping the benefits of a waste disposal system connected to a vacuum storage tank (namely reduction of odours) while meeting the requirements of the guidelines of airlines forbidding the aircraft crew from throwing galley waste into the toilets.

7.4 The objective problem is thus to find a waste disposal system other than the toilet system but providing the same advantages for disposing of galley/food wastes and avoiding returning to old-fashioned solutions such as conventional waste containers located in the galley.

7.5 In the present case the skilled person does not appear to be the aircraft manufacturer as such but rather someone who, having the knowledge of airlines, has to decide on the inner arrangement and equipment of the aircraft and who also has the skills required in the relevant technical fields. Therefore the skilled person consists of a team of at least a responsible person

from an airline and a professional supplier of galley equipment, including of course of all the plumbing arrangements required, such supplier being by definition also a supplier of plumbing equipment for vacuum toilet systems.

- 7.6 This person skilled in the art would have been confronted by the need felt by flight attendants to use a waste disposal means other than simple bins or waste bags which are stored in the reduced space of the aircraft galley and to the working rules laid down by their employers, namely the requirement not to use the toilet system therefor.

Under these circumstances the skilled person would have contemplated the duplication of the waste system used for the toilets and supplying the same unit as in D4 additionally in the galley. Thereby they would as a matter of course have connected this galley system to the existing vacuum storage tank.

A general indication in that direction is already to be found in document D1, which refers in general terms to a device for disposing of waste products in passenger vehicles such as aircraft, trains or buses (column 1, lines 13 to 17). According to D1 the system or the method of disposing of waste could be applied to the toilet system but other applications or locations for the system itself are not excluded, see for instance the general wording of claim 1 of D1.

This general teaching of D1 would give an indication if necessary to the skilled person that a waste collecting and removing system which could be used in toilets



could also be used for disposing of other types of waste.

It is an obvious step to provide the galley of an aircraft with the self-supporting unit of D4, of course in addition to the existing toilet systems.

The results are immediate: the crew can now use a similar waste system as used previously but now provided directly in the galley and having the same technical advantages as previously, namely the ability to get rid of foul-smelling galley waste by storing it in the vacuum storage tank.

Thus there will no longer be any incentive to disregard the instructions not to flush galley waste down the toilets and the disposal of galley/food waste will be executed in a restricted area free of passenger movements.

7.7 The aircraft of claim 1 of auxiliary request V' was therefore obviously be derivable by the skilled person and does therefore not involve inventive step as required in Articles 52(1) and 56 EPC.

8. *Auxiliary request VI'*

8.1 Claim 1 of auxiliary request VI' has all the features of claim 1 of auxiliary request V' and additional features relating to an air exhaust system, namely comprising:

"an exhaust duct (17) coupled to the enclosure (3) for drawing air from the enclosure; and a check valve (18) mounted in the exhaust duct for preventing the backflow of air during a flush cycle."

These added features enable the extraction of impure air otherwise which would otherwise remain in the basin or in the enclosure of the galley waste disposal system. By this means, impure air is extracted by the exhaust pipe to the ventilation arrangement and is thus prevented from escaping into the galley space. The closing of the check valve during the flushing cycle allows air to enter the system to compensate any vacuum effect.

There is no prior art disclosing such an exhaust system including a check valve. But even if such prior art existed, the skilled person would not envisage connecting an exhaust pipe to a single bore among the plurality of bores 352,358 provided in the basin in D4. Connecting a single bore 352,358 to an air exhaust device would not prevent impure air migrating from the basin to the galley space through the remaining openings. On the other hand the skilled person would obviously never provide an exhaust pipe and check valve construction for each bore 352,358 of the basin in D4. But even then the exhaust pipes would be connected not to the enclosure but to the basin itself, from which impure air could escape into the galley.

The subject-matter of claim 1 of auxiliary request is thus not obviously derivable for the skilled person and fulfils therefore the requirements of Article 56 ECP.

- 8.2 The set of dependent claims and the description have been adapted and harmonised to the amended claim 1 and its definition of the invention. The requirements of the EPC are met.

9. The remaining formally allowable auxiliary request VII' does not require examination.

10. *Remittal*

The Board refused the request of Appellant I for remittal of the case but rather exercised the powers within the competence of the Opposition Division (Article 111 EPC) for examining the requests and issues at stake.

The Board, when attempting to find a balance between procedural economy and right to have the case examined by two levels, came to the conclusion that the introduction of document D4 and/or the filing of the relevant new auxiliary requests did not give rise to a new case because these events were nor surprising nor of a nature rendering mandatory a remittal to the first instance Division at this stage of the proceedings.

Another relevant factor justifying the refusal of the remittal is that the Board actually confirmed the part of the impugned decision rejecting the first auxiliary requests because they offended the requirements of Rule 80 EPC or 57(a) EPC 1973.

In such a context remittal for the purpose of examining the patentability of the claims with regard to a newly introduced document (D4) would have no effect at all on the decision.

**Order**

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

1. The Appellant/Proprietor's request for remittal of the case to the Opposition Division for substantial examination is refused.
2. The Appellant/Proprietor's request for referral of a question to the Enlarged Board of Appeal is refused.
3. The case is remitted to the Opposition Division with the order to maintain the patent on the basis of:
  - (a) Claims 1 to 8 according to auxiliary request VI' filed on 1 August 2008;
  - (b) The description pages 2 and 3 filed during the oral proceedings;
  - (c) The single Figure as granted.

The Registrar:

The Chairman:

A. Counillon

U. Krause