Datasheet for the decision of 9 October 2019

Case Number: T 0245/17 - 3.2.01
Application Number: 09732839.7
Publication Number: 2280842
IPC: B60K15/04
Language of the proceedings: EN

Title of invention:
ANTI SIPHON TANK INLET

Applicant:
Tiss Limited

Headword:

Relevant legal provisions:
EPC Art. 56, 84, 123(2)

Keyword:
Claims - clarity after amendment (yes)
Amendments - added subject-matter (no)
Inventive step - (yes)

Decisions cited:
Case Number: T 0245/17 - 3.2.01

DECISION
of Technical Board of Appeal 3.2.01
of 9 October 2019

Appellant: Tiss Limited
(Applicant)
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 4 July 2016
refusing European patent application No.
09732839.7 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman G. Pricolo
Members: W. Marx
O. Loizou
Summary of Facts and Submissions

I. European patent application No. 09732839.7 was refused by the Examining Division with decision dated 4 July 2016.

The Examining Division was of the opinion, inter alia, that the phrase "wherein the baffle surface is at least substantially free from apertures" in independent claim 1 of the Main Request was not clear in the sense of Article 84 EPC and that claim 1 of the Second Auxiliary Request, albeit Article 84 was complied with, lacked an inventive step (Article 56 EPC) having regard to the prior art disclosed in documents:

D1: NL 1 030 117 C2;
D6: GB 2 382 568 A.

II. The appellant (applicant) filed an appeal against this decision on 14 September 2016. With its statement of grounds of appeal dated 14 November 2016, the appellant submitted sets of claims according to a Main Request (corresponding to the Main Request filed before the Examining Division) and according to First to Eighth Auxiliary Requests.

III. On 21 February 2019 the Board issued a summons to oral proceedings to be held on 9 October 2019. In a communication pursuant to Article 15(1) RPBA (Rules of Procedure of the Boards of Appeal, OJ EPO 2007, 536), dated 16 August 2019, the Board expressed the provisional opinion that, whilst the subject-matter of claim 1 of the Main Request lacked clarity and inventive step and the subject-matter of claim 1 of the First to Fourth Auxiliary Requests could not establish inventiveness, the subject-matter of claim 1 of the
Fifth Auxiliary Request was neither known nor obvious in view of the cited prior art.

IV. With letter dated 7 October 2019 in response to the Board's communication the appellant requested cancellation of the pending Main Request and First to Fourth Auxiliary Requests. The previous Fifth Auxiliary Request was made the new Main Request and an amended description was filed which corresponded to the claims of the new Main Request and acknowledged document D1 as the closest prior art. Moreover, the applicant's request for oral proceedings was withdrawn, on condition that the Board was minded to accept the present application on the basis of the new Main Request and attached amended description.

V. In a telephone conversation with the rapporteur on 8 October 2019 some minor outstanding issues were discussed and appropriate corrections agreed upon, which were filed by the appellant electronically the same day (amended description, received 8 October 2019, 14:03 (CEST); final version of the set of claims of the Main Request, received 8 October 2019, 15:19 (CEST)).

The appellant accordingly requested that the decision under appeal be set aside and that a patent be granted on the basis of the newly filed and corrected documents and Figures 1 to 6 as originally filed.

VI. Oral proceedings appointed for 9 October 2019 were then cancelled.

VII. Claim 1 according to the Main Request reads as follows:

"1. A vehicle anti-siphon inlet device comprising:
a mounting structure (2) for attachment to the inlet of a vehicle fuel tank;
   a tubular inlet body (1) having a central bore defined by a tubular wall and having a longitudinal axis (X);
   the tubular body having a length (L) defined between a proximal end and a distal end;
   the tubular body depending from the mounting structure (2) at the proximal end;
   the tubular wall being open at the proximal end for receiving fuel;
   a plurality of apertures (8, 9) provided through the tubular wall for egress of fuel;
   wherein the distal end of the tubular body is blocked by a baffle (3) defining a baffle surface (3a) facing into the bore of the tubular body (1),
   wherein at least a portion of the baffle surface (3a) is inclined at an acute angle relative to the longitudinal axis (X) to deflect fuel towards apertures (8, 9) in the tubular wall;
   wherein the baffle surface (3a) is at least substantially free from apertures such that no more than 25% of the baffle surface (3a) is apertured;
   wherein a peripheral portion of the base of the baffle (3) curves radially outwards towards the tubular wall such that the peripheral portion defines a concave portion of the baffle surface (3a) which faces the tubular body (1);
   wherein the baffle (3) extends along at least about 25% the length (L) of the tubular body (1) in a direction parallel to said longitudinal axis (X) of the tubular body (1); and
   wherein the surface (3a) of the baffle rises to an apex and the baffle comprises a single axial bore (10) which passes from the apex of the baffle surface (3a) to the bottom surface (3b)."
Reasons for the Decision

1. The appeal is admissible.

2. Claim 1 according to the Main Request complies with the requirements of Article 84 EPC. Specifically, the phrase "wherein the baffle surface is at least substantially free from apertures" which the Examining Division found to be unclear has been further specified by setting an upper limit for the baffle apertures ("such that no more than 25% of the baffle surface is apertured"). The Board agrees with the contested decision (see point 21, as regards the former Second Auxiliary Request) that Article 84 EPC is complied with in view of this combination of features. Moreover, the Board observes that the term "substantially free from apertures" is further clarified by the feature that "the baffle comprises a single axial bore which passes from the apex of the baffle surface to the bottom surface", which specifies a single aperture in a specific location of the baffle.

In order to avoid inconsistencies between claim 1 and the dependent claims, in particular claim 3 which specifies a second axis of a surface of revolution for the inclined portion of the baffle surface, the axis of the tubular body in claim 1 (and also in claim 7) has been defined as "longitudinal axis", as clearly derivable from Figure 1.

The baffle as specified in claim 1 now comprises a single bore, so it is also clear that the feature that "the distal end of the tubular body is blocked by a baffle" only relates to a mechanical blocking function, blocking the "insertion of a siphon tube of any
practical diameter", as stated in the description of the application as filed (page 1, third paragraph) with regard to the known prior art.

Therefore, the Board finds that the set of claims according to the Main Request is formulated in a clear manner and fulfils the requirements of Article 84 EPC.

3. Independent claim 1 of the Main Request is a combination of claims 1, 2, 6, 10, 12, 14 as originally filed and includes further features which have a basis in the description or the drawings, in particular:
- The subject-matter of claim 1 is limited to a vehicle anti-siphon inlet device, as described throughout the whole application as filed (see e.g. page 1, lines 3-4).
- A mounting structure for attachment to the inlet of a vehicle fuel tank is disclosed on page 10, line 31 to page 11, line 1 (see also page 6) of the application as filed.
- The axis of the tubular body is now specified as "longitudinal axis" for reasons of clarity, as implicitly derivable e.g. from Figure 1.
- The definition of the tubular body's length between a proximal end and a distal end is disclosed on page 7, lines 15-17 of the application as filed. This passage also describes the relation between the proximal end and the mounting structure; from page 6, lines 15-17 it is further clear that the tubular body depends from the mounting structure at its proximal end.
- The concave portion of the baffle surface facing the tubular wall is clearly disclosed in Figure 6 of the application as filed, which shows an embodiment according to the invention.
A single axial bore which passes from the apex of
the baffle surface to the bottom surface is
explicitly described in relation to the embodiments
of Figures 5 and 6 (page 9, lines 15-17) in the
application as filed.
The remaining amendments to claim 1 (as originally
filed) relate only to minor editorial changes.

Amendments were also made to the dependent claims,
where necessary, in order to bring them into conformity
with independent claim 1. Moreover, the description was
amended accordingly.

The Board is satisfied that the amendments made to the
claims of the Main Request and the description comply
with the requirements of Article 123(2) EPC.

4. The subject-matter of claim 1 of the Main Request
involves an inventive step (Article 56 EPC).

4.1 Document D1 represents the closest prior art and
discloses an anti-siphon inlet device showing a conical
baffle free from apertures.

As found by the examining division, document D1 is
considered to be the closest prior art and discloses a
vehicle anti-siphon inlet device (1) comprising a
tubular inlet body (3) having a central bore defined by
a tubular wall (see Figure) and a longitudinal axis.
The tubular wall defines an (upper) open proximal end
for receiving fuel, and a plurality of apertures (11)
is provided through the tubular wall for egress of
fuel. The (lower) distal end of the tubular body is
blocked by a baffle defining a baffle surface (12)
facing into the bore and extending in a direction
parallel to the longitudinal axis of the tubular body.
The baffle surface is inclined at an acute angle relative to the longitudinal axis (see Figure) and deflects fuel towards the apertures (11) in the tubular wall. The baffle surface (12) does not include any apertures (Figure), i.e. is substantially free from apertures such that no more than 25% of the baffle surface is apertured, as required by the wording of claim 1.

Notably, D1 does not explicitly or implicitly disclose - a peripheral portion of the base of the baffle curving radially outwards towards the tubular wall and defining a concave portion of the baffle surface which faces the tubular body (which according to the application improves fuel flow), - a baffle extending along at least about 25% the length of the tubular body and comprising a single axial bore which passes from the apex of the baffle surface to the bottom surface (which according to the application provides a conduit through which any displaced air in the fuel tank can pass to the atmosphere without any significant impedance due to fuel flow, thus improving the rate of fluid flow).

As regards the differing features relating to the baffle, the cited prior art does not show or suggest a baffle comprising a single axial bore in the region of the apex of the baffle's surface which helps in venting air from the tank whilst filling the tank. Moreover, the Board cannot see that the skilled person would be prompted to arrive at the subject-matter of claim 1. Therefore, in the Board's judgment, the requirements of Article 56 EPC are fulfilled.

5. In view of the foregoing, the Board finds that the subject-matter of claim 1 of the Main Request as well
as its dependent claims 2 to 8 relating to particular embodiments of the invention and the accordingly adapted description can form the basis for grant of a patent (Article 52(1) EPC).

Order

For these reasons it is decided that:

1. The appealed decision is set aside.

2. The case is remitted to the first instance with the order to grant a patent in the following version:
   - claims 1 to 8 of the main request, submitted electronically on 8 October 2019, 15:19 (CEST)
   - description pages 1 to 10, submitted electronically on 8 October 2019, 14:03 (CEST)
   - drawing sheets 1/6 to 6/6 as originally filed.

The Registrar:  The Chairman:

A. Vottner     G. Pricolo

Decision electronically authenticated