Datasheet for the decision
of 5 May 2010

Case Number: T 1209/09 - 3.4.02
Application Number: 00119308.5
Publication Number: 1081487
IPC: G01N 21/71
Language of the proceedings: EN

Title of invention: Nebulizer

Patentee: Hitachi, Ltd.

Opponent: -

Headword: -

Relevant legal provisions: EPC Art. 123(2)

Relevant legal provisions (EPC 1973): -

Keyword: "Claim 1 (amended on appeal) - added subject matter (no)"
"Reimbursement of the appeal fee (yes, failure to give reasons for not admitting amended new claims into the procedure)"

Decisions cited: -

Catchword: -
Case Number: T 1209/09 - 3.4.02

DECISION
of the Technical Board of Appeal 3.4.02
of 5 May 2010

Appellant:
Hitachi, Ltd.
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Tokyo 100-8010 (JP)

Representative:
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Decision under appeal:
Decision of the Examining Division of the European Patent Office posted 23 December 2008 refusing European patent application No. 00119308.5 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: A. G. Klein
Members: M. Rayner
B. Müller
Summary of Facts and Submissions

I. The applicant has appealed against the decision of the examining division refusing European patent application number 00 119 308.5. The patent application concerns nebulisers.

II. In a communication dated 11.11.2005 (see points 2.1 to 2.3) the examining division proposed an independent claim and claims dependent therefrom which it considered would be allowable in the context of substantive patentability. In a communication dated 29.03.2007 (see point 4) on the other hand, the division considered it not to be apparent which part of the application could serve as a basis for a new, allowable claim.

The examining division issued a summons dated 15.09.2008 to oral proceedings on 09.12.2008, which duly took place. In that summons there was a statement that "The final date for making written submissions and/or amendments (R. 116 EPC), is 07.11.08."

III. According to the minutes of oral proceedings before the examining division, the appellant referred to "the legal situation and to R. 86 and 46 EPC" (see the middle of page 1).

Moreover, according to a passage towards the bottom of page 3 of the minutes, the possibility of drafting new claims was discussed. The examining division enquired briefly about the possibilities, but, after a break, informed the applicant that new submissions would not be accepted.
IV. In the decision under appeal, the examining division substantiated its refusal with lack of compliance with Article 123(2) EPC, i.e. added subject matter, of independent claims 1 and 13 before it.

(a) "Collage of features"

The division was of the view that the common part of all requests before it amounted to a "collage" of features present in independent claims of the original set and in parts of the description taken in isolation. The applicant is thus taking features only disclosed in a particular combination as a reservoir of features to artificially create a new claim. The skilled person is thus being presented with a combination of features which is not directly and unambiguously derivable from that previously presented by the application.

(b) Previous Communications

The division explained that the reasons why independent claims 1 and 13 contravene Article 123(2) EPC had already been put forward in previous communications referenced as C3, item 1 and C4 items 1.2-1.4. The reasons concerned include the following:

(i) gas supply unit (in present claim 1 the feature is not comprised by the nebuliser); and

(ii) gas supplied in a range from 4 to 7 times the atmospheric pressure,

are not seen in the amended claim 1.
V. The appellant requested that the decision under appeal be set aside and a patent granted on the basis of a main or one of its auxiliary requests. The appellant advanced arguments, including the following, in support of its appeal.

The original disclosure, in the appellant's view, of the sets of claims according to the requests was presented in tabular form, an extract from the table for the independent claims of the main request being

<table>
<thead>
<tr>
<th>New Claim No.</th>
<th>Original disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,15</td>
<td>claim 2; page 13, lines 16-22; page 14, lines 2-7; page 17, line 6, to page 18, line 29; page 19, line 14, to page 20, line 25; Figures 1, 2, 5, 18, 19.</td>
</tr>
</tbody>
</table>

The appellant argued that in the grounds for the decision under appeal, despite discussion during the oral proceedings by the applicant in the context of the legal situation, the examining division did not even mention decision T0631/97, from which decision it follows that the examining division was entitled to review the non-unity judgement of the search division.

Moreover, during the oral proceedings the chairman indicated the pending claims were inadmissible under Article 123(2) EPC, but a limitation to subject matter of one of the independent claims could introduce patentability objections, a "trap situation" was mentioned. Therefore the applicant had to accept the
opinion of the examining division that all pending claims were inadmissible without being given the possibility of reacting. Yet the examining division had already found patentable subject matter in the application and should therefore have let the representative present amended claims based thereon. Furthermore, the examining division did not give any reasons for non acceptance of new claims in the grounds for the decision.

Both the lack of reference to decision T0631/97 and the non acceptance of new claims were considered procedural violations justifying reimbursement of the appeal fee.

VI. The board issued a communication setting out its preliminary opinion, including the following.

The board was likely to consider the reasons for refusal given by the examining division not to be convincing against the independent claims of the main request. Moreover, having regard to the passages referred to by the appellant, the board was likely to consider claim 1 of the main request, and, correspondingly, claim 15 to comply with Article 123(2) EPC.

The board informed the appellant of its considerations concerning whether it should complete examination of the application itself or remit the case to the first instance.

It was now up to the appellant to respond to the board's comments, indicating, for example, whether it maintained its request for oral proceedings to hear the
case, focusing on reimbursement, as the next procedural step, or whether it withdrew its request, in which case, the board would consider remitting the case back to the first instance for further prosecution. The board would, of course, take account of the response of the appellant, before taking any such or other actions.

VII. Following the communication from the board, the appellant withdrew its request for oral proceedings and requested that the decision under appeal be set aside and the case be remitted to the first instance for further prosecution. It was further requested that the appeal fee be reimbursed.

VIII. Independent claims 1 and 15 of the main request are worded as follows.

"1. Spray gas nebulizer, comprising
a chamber (1, 2) which comprises
• a first orifice through which one end of at least one capillary tube (5) is inserted, through which a liquid is introduced,
• a second orifice being a gas inlet (6) through which compressed gas is delivered from a gas supply unit along the at least one capillary tube (5),
• a third orifice through which the liquid in the at least one capillary tube (5) and the compressed gas are discharged to the spray end of the chamber (1, 2), and
• an orifice member being a plate (7) provided at the spray end of the chamber (1, 2) and comprising at least one fourth orifice (4) into which the other end portion of one capillary tube (5) is inserted, and the
compressed gas is discharged through the clearance defined between the fourth orifice(s) (4) and the capillary tube(s) (5), to thereby spray the liquid, wherein the arrangement of the plate (7) of the orifice member, the capillary tube(s) (5) and the fourth orifice(s) (4) and the pressure of the compressed gas supplied from the gas supply unit to the chamber (1, 2) through the gas inlet (6) are such that the compressed gas discharged through the clearance between the capillary tube(s) (5) and the fourth orifice(s) (4) has a flow velocity within the supersonic region.

15. Method of nebulizing a sample liquid with a compressed spray gas by
- providing a chamber (1, 2) which comprises
  • a first orifice through which one end of at least one capillary tube (5) is inserted and through which the sample liquid is introduced,
  • a second orifice being a gas inlet (6) through which compressed gas is delivered from a gas supply unit along the at least one capillary tube (5),
  • a third orifice through which the sample liquid in the at least one capillary tube (5) and the compressed gas are discharged to the spray end of the chamber (1,2),
and
• an orifice member being a plate (7) provided at the spray end of the chamber (1, 2) and comprising at least one fourth orifice (4) into which the other end portion of one capillary tube (5) is inserted, and the compressed gas is discharged through the clearance defined between the fourth orifice(s) (4) and the capillary tube(s) (5), to thereby spray the sample liquid,
wherein
the pressure of the compressed gas supplied from the
gas supply unit to the chamber (1, 2) through the gas
inlet (6) is adjusted such and the arrangement of the
plate (7) of the orifice member, the capillary tube(s)
(5) and the fourth orifice(s) (4) is made such
that the compressed gas discharged through the
clearance between the capillary tube(s) (5) and the
fourth orifice(s) (4) has a flow velocity within the
supersonic region."

Reasons for the Decision

1. The appeal is admissible.

2. Documents as filed

There follow extracts from the documents as filed.

2.1 Claim 2

"2. A nebulizer, comprising:

at least one tube (5) through which a liquid is
introduced;
a gas supply unit for supplying a compressed gas;
a chamber having a structure wherein the tube (5) is
inserted through a first orifice, the compressed gas is
delivered along the tube (5) through a second orifice,
and the liquid and the compressed gas are discharged
through a third orifice; and

a plate (7) placed so as to allow an end of the tube (5)
on the side of the discharge of the liquid to the third
orifice to be inserted into a fourth orifice;
the nebulizer having a structure wherein the compressed gas is discharged from between the tube (5) and the fourth orifice (4) defined in the plate (7) at a supersonic region speed in a range in which the pressure of the compressed gas supplied to the chamber ranges from 4 to 7 times the atmospheric pressure."

2.2 Page 13, lines 8 to 16

"It is the problem underlying the present invention to provide a nebulizer with high spray efficiency, which is capable of producing droplets of sub-micron size in large quantities within a wide range of liquid flow rates at a limited gas flow rate.

In order to solve the above problem, the present invention provides a nebulizer which effectively makes use of the momentum of a gas flow for purposes of liquid spraying by using a supersonic spray gas flow lying in the axial direction of a capillary (flow path)."

3. Added subject matter

3.1 "Collage" of features

3.1.1 The division saw the common part of the independent claims before it as a collage of features present in claims in the originally filed set together with parts of the description taken in isolation. This collage of features was not, in its view, directly and unambiguously derivable from the documents as filed.
3.1.2 However, in considering the independent claims of the main request now up for decision, the board agrees with the appellant that their features are disclosed according to the Table presented in the Facts and Submissions above. In particular, all the features present in the claims are not "isolated" from one another because they are all displayed by Embodiment 1 as disclosed in the application, which the board considers to mean that no collage of features is presented by the subject matter of the independent claims.

3.2 Reasons pertaining to particular features

3.2.1 A gas supply and its pressure is no longer required in the claims.

A gas supply and compressed gas are mentioned in the claims for comprehensibility. The board considers it not to be necessary to recite positively that the nebuliser comprises a gas supply unit with a specific pressure because the structure recited in the independent claims of the main request followed by the recitation of a flow velocity within the supersonic region meets that with which the invention is said to be concerned. In particular, it is apparent to the skilled person from the application as filed (see, for instance, section 2.2 above), that the invention is concerned with the momentum of a gas flow for purposes of liquid spraying by using a supersonic spray gas flow lying in the axial direction of a capillary flow path. Accordingly, the board sees no violation of Article 123(2) EPC in this respect.
3.2.2 Any other differences between claim 2 as originally filed and the independent claims of the main request concern simply recasting between "nebuliser" and "method" form or amount to no more than difference in wording but not substance and therefore do not give rise to any objection under Article 123(2) EPC.

4. Reimbursement of the appeal fee

4.1 Pursuant to Rule 67 EPC 1973, the reimbursement of appeal fees shall be ordered where the Board of Appeal deems an appeal to be allowable if such reimbursement is equitable by reason of a substantial procedural violation.

4.2 Decision T0631/97 is mainly concerned with unity and review of the finding of the search division on unity. The decision refusing the application was, however, based on Article 123(2) EPC. Responsive to the communication of the board, the appellant did not advance any reason as to why it was necessary for the examining division to discuss decision T0631/97 in its decision in relation to added subject matter. The board therefore sees no reason related to decision T0631/97 for reimbursing the appeal fee, as that decision was neither relevant to reaching the decision under appeal nor is it relevant to reaching a decision relating to Article 123(2) EPC on appeal.

4.3 The "new claims" and "new submissions" the possible drafting of which was discussed during the oral proceedings before the examining division (see minutes, towards the bottom of page 3) were not filed before the "final date for making written submissions and/or
amendments" as specified in the summons to oral proceedings. For this reason, and because of the provisions of Rule 137(3) EPC, the examining division was not obliged to take them into consideration, but had to exercise its discretion in this regard. If, in exercising such discretion, amended claims are not admitted, the reasons therefor must be given in the decision. In the present case, however, no such reasons were given in the decision under appeal. The decision is even silent on the pertinent facts set out in the appropriate portion of the minutes referred to above. According to that portion, the "possibility to draft new claims" during the oral proceedings was discussed during those proceedings, and the examining division informed the applicant that it would not accept new submissions. Thus the board concludes that the decision under appeal was not reasoned in respect of an essential point, i.e. admission of new claims, in conformity with Rule 111(2) the EPC. This amounts to a substantial procedural violation that justifies reimbursement of the appeal fee.

5. Procedure

5.1 Since the board is not convinced by the reasons for refusal given by the examining division in relation to the main request on appeal, it has to set the decision under appeal aside.

5.2 The board considered completing examination of the application itself, but could not determine with confidence the position of the examining division on, for instance substantive patentability, in view of diverging views on patentability expressed during the
examination procedure in the communications of 11.11.2005 and 29.03.2007. The decision under appeal itself is silent even by way of obiter dicta on substantive patentability. As an appeal instance, charged primarily with reviewing the decision of the first instance, the board therefore tended to the approach that completing the examination itself would be inappropriate in the present case, despite any possible advantage in time saving.

5.3 Responsive to its communication, the board received a request for remittal from the appellant, thus not implying disapproval of its approach. The board accordingly concluded that remittal would be appropriate as the next procedural step. Since the appeal is successful in relation to the main request, it is not necessary to consider the auxiliary requests in the present decision.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

3. The request for reimbursement of the appeal fee is allowed.

The Registrar: M. Kiehl

The Chairman: A. G. Klein