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Aktenzeichen / Case Number / N° du recours : T 289/88 - 3.2.2

Anmeldenummer / Filing No / N° de la demande : 80 301 397.8

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Bezeichnung der Erfindung: Method and apparatus for producing a liquid jet  
Title of invention:  
Titre de l'invention :

Klassifikation / Classification / Classement : A61H 13/00, A61C 17/02

### ENTSCHEIDUNG / DECISION

vom / of / du 2 May 1989

Anmelder / Applicant / Demandeur :

Patentinhaber / Proprietor of the patent /  
Titulaire du brevet :

Teledyne Industries, Inc.

Einsprechender / Opponent / Opposant :

Gimelli & Co. AG

Stichwort / Headword / Référence :

EPÜ / EPC / CBE Article 56

Schlagwort / Keyword / Mot clé :

"Inventive step - yes"

Leitsatz / Headnote / Sommaire

Europäisches  
Patentamt

Beschwerdekammern

European Patent  
Office

Boards of Appeal

Office européen  
des brevets

Chambres de recours



Case Number : T 289/88 - 3.2.2

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.2  
of 2 May 1989

**Appellant :**  
(Opponent)

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**Decision under appeal :**

Interlocutory decision of the Opposition Division of  
the European Patent Office dated 7 April 1988  
concerning maintenance of European Patent  
No. 0 029 636 in amended form.

**Composition of the Board :**

**Chairman :** G. Szabo

**Members :** C. Andries

W. Moser

## Summary of Facts and Submissions

- I. European patent No. 0 029 636 comprising twenty claims was granted to the Respondent on 14 September 1983 in response to European patent application No. 80 301 397.8 filed on 28 April 1980.
- II. The Appellant filed an opposition against the European patent requesting that it be revoked. The opposition was mainly based on the following documents:
- D1: DE-C-1 528 366; and  
D2: DE-A-2 735 427.
- III. By interlocutory decision dated 7 April 1988, the Opposition Division maintained the patent as amended by the Respondent.
- IV. The Appellant lodged an appeal against the decision on 2 June 1988, paying the appeal fee on the same date. In his Statement of Grounds, filed on 15 July 1988, the Appellant raised the objection that the subject-matter of both Claims 1 and 8 would not involve an inventive step in view of documents D1 and D2.
- VI. During the oral proceedings held on 2 May 1989, the Respondent filed a new set of Claims 1 to 19 and new columns 1, 2, 9 and 10 of the description. He argued that the subject-matter of both Claims 1 and 8 was new and inventive.

The Appellant mainly repeated his arguments, and argued that in Claim 1 of document D1 it would not be stated from which side the cover is to be slid over the pump housing; that only two possibilities of sliding a cover over an

apparatus with respect to the axis of the inlet would be possible (parallel or perpendicular); that the teaching of document D1 only would indicate in general terms to slide a cover over the pump housing; that most sides of an apparatus could be used as a supporting base; that there would be no link between the problem put forward and the suggested solution; that document D2 would also show a compact design; and that the wording of Claim 1 would not correspond with the claimed category.

The Respondent contested the above arguments.

VI. The independent Claims 1 and 8 read now as follows:

Claim 1: "A method of producing a liquid jet by pumping liquid through an inlet (122) in a pump housing (22) from a reservoir (24) serving, when removed from the pump housing (22) and oriented into an inverted position, also as a partial cover for the pump housing (22), arranging said inlet (122) in a side wall (55) such that it extends laterally in the pump housing (22) when the pump housing (22) is standing in a storage position thereof (Figure 1) on a first supporting base (38), providing for coverage of said laterally arranged inlet (122) by the inverted reservoir (24) prior to removal of the reservoir (24) from the pump housing (22) for reception of a liquid supply in the reservoir (24), laying the pump housing (22) on its side from its upright storage position (Figure 1), said side then acting as a second supporting base (56), larger than said first base (38), for the pump housing in its operative position (Figures 2, 4) and said inlet (122) then facing upwardly away from said side (Figure 4), placing the removed reservoir (24) on the pump

housing (22) now lying in its operative position (Figures 2, 4) and connecting an outlet of said reservoir (24) to said now upwardly facing inlet (122), and pumping liquid from the reservoir (24) to a jet forming nozzle (26)."

Claim 8: "Apparatus for producing a liquid jet, comprising a reservoir (24) connectable to an inlet (122) in a pump housing (22), the reservoir (24) serving in an inverted position also as a partial cover for the pump housing and the pump housing having a supporting base (56) on which it stands when the pump housing is in its operative position, said apparatus also comprising at least one jet forming nozzle (26) to which a pump (28) in the housing (22) can be coupled, characterised in that the pump housing (22) has a first supporting base (38) on which it stands when the pump housing is in a storage position (Figure 1), in which position said inlet (122) is located in a side wall (55) of the pump housing (22) and the reservoir is slid over the pump housing in a direction perpendicular to the axis of the inlet, and the pump housing (22) has as a second supporting base (56) said first mentioned supporting base (56) laterally of and larger than said first base (38) and opposite said side wall (55) for supporting the pump housing (22) and the reservoir (24) when the reservoir is positioned on said side wall (55) and the pump housing is in its operative position (Figures 2, 4)."

VII. The Appellant requests to set aside the decision and to revoke the patent.

The Respondent requests to maintain the patent on the basis of the following documents:

description: - columns 1, 2, 9 and 10 as filed during the oral proceedings;

- columns 3 to 8 as granted;

Claims: 1 to 19 as filed during the oral proceedings;

drawings: sheets 1 to 5 as granted.

The Respondent also submitted an auxiliary request to the effect that the case be remitted to the Opposition Division for further consideration as regards the maintenance of the patent on the basis of any of the dependent claims.

#### Reasons for the Decision

1. The appeal is admissible.
2. There are no formal objections under Article 123 EPC to the present text of the patent in suit since the proposed amendments in the description and in the claims are adequately supported by the application as originally filed and do not extend the protection conferred.

Since this has not been contested, it is not necessary to substantiate this further.

3. With respect to the objection of the Appellant relating to the wording of the method Claim 1, the Board agrees with the explanation of the Respondent given during the oral proceedings, namely that Claim 1 indicates the use of a piece of apparatus. Indeed, in

order to pump, the specified apparatus has to be brought from its specific storage position into its specific use (or pump) position, i.e. "laying the pump housing on its side ...".

4. Novelty.

After examination of the cited documents, the Board is satisfied that none of them discloses an apparatus or a method using that apparatus having all the features as defined respectively in Claim 8 or in Claim 1.

Since this has never been disputed, there is no need for further detailed substantiation of this matter.

Therefore, the subject-matter as set forth in Claim 1 and in Claim 8 is to be considered novel within the meaning of Article 54 EPC.

5. Inventive step.

Since the method according to Claim 1 (cf. above point 3) is merely the use of the apparatus according to Claim 8, the arguments relating to inventive step are hereinafter primarily focussed on the apparatus according to Claim 8.

5.1 The patent in suit relates to an apparatus for producing a liquid jet according to the pre-characterising portion of Claim 8.

Such an apparatus is known from document D1.

The apparatus according to document D1, in particular according to Figures 1 to 3 thereof, includes a removable cover which, when inverted, serves as a

reservoir for water supplied to the unit. This apparatus, although compact, is still too bulky. It is also too big, e.g. for convenient storage for the transport in small containers such as briefcases, handbags etc., since the base of the reservoir mirrors the shape of the base of the apparatus which is normally the largest side of the unit for stability reasons.

Nevertheless, the aim of making apparatuses compact so that they can be used for transport in small containers is already known from document D2.

- 5.2 The technical problem to be solved consists therefore in providing another form of such a compact apparatus. It is understood that, in this context, compactness is meant to provide appropriate shapes for use and storage, respectively.

The Board accepts that this problem is solved by the features mentioned in Claim 8. Indeed, by the provision of two different supporting bases and an adapted reservoir, which can be slid over the pump housing for storage in a direction perpendicular to the axis of the inlet, it becomes possible to use the largest of these supporting bases as a base during use, so that a certain stability is guaranteed during use of the apparatus. On the other hand, the smallest supporting base is used during storage, so that, for example, less space is needed on a shelf in the bathroom when the apparatus is not used.

The objection of the Appellant that the features in the characterising portion of Claim 8 do not contribute to obtain a compact apparatus, cannot be followed by the Board. There is no need to have specific indications relating to the measures of a compact device in the

wording of Claim 1. It is obvious for a skilled design engineer looking for another form of a compact device to modify within the scope of the claim the dimensions of a device already showing such characteristics.

It is easy to adjust the design so as to provide for a base in use which is larger than the base for storage, as required in the claim. Thus, the size of the base area is optimised in these respects.

5.3 A person skilled in the art, starting from an apparatus according to document D1, who would try to obtain another form of such a compact apparatus, could not find, however, an indication in the cited documents to use a specific apparatus according to Claim 8.

5.3.1 Document D1 describes an apparatus with only one supporting base and with a cover which, in its inverted position, can be used as a reservoir.

According to the embodiment shown in the Figures 1 to 7, the cover is slid over the apparatus from above, parallel to the inlet axis. This document does not indicate or suggest either the presence of two supporting bases or the sliding of a cover (reservoir) in a direction perpendicular to the axis of the inlet.

Thus, contrary to the opinion expressed by the Appellant, the Board takes the view that the teaching of document D1 implies the use of a cover (Deckel) slid over the apparatus from above. It is true that Claim 1 only mentions that the cover, which can also be used as a reservoir, is slid over the apparatus, but a person skilled in the art reading document D1 as a whole before the priority date of the patent in suit, can only find the teaching of sliding the cover over the apparatus

from above. Indeed, the whole content of document D1 points in this direction (the expressions "Deckel", "umwenden", "Flüssigkeitsbehälter": column 2, lines 59 to 61, 63 and 64; the form of the housing 11 including a ridge on its side and the sloped side surfaces; the presence of rubber feet 32).

There is no indication or suggestion which points to other possibilities.

- 5.3.2 Also the argument put forward by the Appellant that each normal appliance would have five or six areas which could be used as supporting bases and that it would depend on the user which side he uses as a supporting base, cannot be followed by the Board since this argument is not supported by the cited prior art, particularly by the disclosure of document D1, which neither explicitly nor implicitly indicates, shows or suggests a second supporting base. Only one side of the housing is provided with four rubber feet. On the contrary, the housing is provided with a ridge on its side and with sloped side surfaces, so that it is not correct to say that one of these side surfaces can be used or is intended to be used as a supporting base.
- 5.3.3. Although it is true that a flat surface - if present - of an apparatus can be used as a supporting base, it nevertheless is obvious that a skilled design engineer, who wants to use a wall as a supporting base, has to adapt that wall, if not the apparatus, for the indicated purpose, at least by making that wall flat. Indications or suggestions in this respect are however not present in the disclosure of document D1, particularly since the apparatus according to document D1 remained during use and storage in its same position. As regards obviousness, the question is not whether the skilled

person could have provided a particular feature, but rather whether he would have done so in expectation of some improvement or advantage (cf. T 2/83, OJ EPO, 1984, 265). The gist of the present invention is not merely related to a selection but also implies modifications in the structure of the appliance.

5.3.4 Document D2 describes a compact device comprising a collapsible reservoir and a separate cassette. This document teaches to avoid the big and heavy rigid reservoir according to document D1 by the use of a light, flexible and collapsible reservoir (Claim 1; page 2, first three paragraphs). For transport purposes, a separate cassette can be used (Claim 21). The apparatus always remains in the same spatial position during operation (Figure 1) and storage (Figure 5). It is the collapsible reservoir which, during storage, covers the water inlet due to its collapsed state.

A person skilled in the art reading document D2 is taught to avoid the rigid reservoir, so that it can neither be obvious to use a rigid reservoir again, nor to see this as a sensible starting point to develop the present invention. In any case, a skilled person does not find in document D2 an indication or a suggestion to provide two supporting bases and a reservoir to be slid over the housing in a direction perpendicular to the axis of the inlet.

The Board cannot follow the argument raised by the Appellant that a further feature, i.e. a protective cassette according to document D2, suggests to a person skilled in the art the use of a cover which can be slid over the apparatus in the claimed direction. Indeed, the cassette cannot be compared with the reservoir within the meaning of the patent in suit, since it is neither

intended or able (no valve) to replace the collapsible reservoir even though it can be used to fill the reservoir. Furthermore, the cassette, when used, covers the apparatus completely so that it cannot be regarded as a partial cover.

- 5.3.5 The Board has also considered the further documents cited in the proceedings, which are far less relevant for the assessment of the inventive step, and found them not prejudicial to the present Claim 8, neither alone nor in combination with the documents cited above.
- 5.4 Since, in view of obtaining another form of a compact apparatus, the cited documents do not give to a person skilled in the art the slightest hint to use an apparatus with two different supporting bases and a reservoir which can be slid over the housing in a direction perpendicular to the axis of the inlet, the subject-matter of Claim 8 involves an inventive step within the meaning of Article 56 EPC.
6. Claim 8 is, therefore, allowable under Article 52(1) EPC.

The same applies to the independent Claim 1 which concerns a method of producing a liquid jet, since the realisation of the claimed method is directly linked, through the use of the specific apparatus according to Claim 8, to the realisation of the claimed apparatus, e.g. by "laying the pump housing on its side" etc.

7. Based upon the allowable Claims 1 and 8 and dependent Claims 2 to 7 and 9 to 19, which concern preferred embodiments of the invention, and the modified description as well as the published drawings, the patent may be maintained.

8. In view of the foregoing, it is not necessary to consider the Appellant's auxiliary request.

**Order**

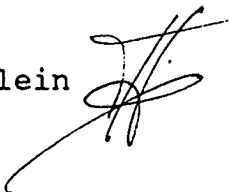
**For these reasons, it is decided that:**

1. The decision of the first instance is set aside.
2. The case is remitted to the first instance with the order to maintain the European patent on the basis of the following documents:
  - specification columns 1, 2, 9 and 10 and Claims 1 to 19 as submitted during the oral proceedings;
  - specification columns 3 to 8 and
  - drawings as granted.

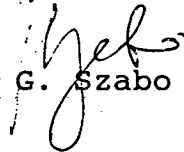
The Registrar:

The Chairman:

F. Klein



G. Szabo



Const. Gaud  
W. Moser