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D E C I S I O N
of 21 July 2000

Case Number: T 0741/99 - 3.2.4

Application Number: 92203761.9

Publication Number: 0546620

IPC: A47L 9/28

Language of the proceedings: EN

Title of invention:

Vacuum cleaner

Patentee:

Koninklijke Philips Electronics N.V.

Opponent:

BSH Bosch und Siemens Hausgeräte GmbH

Headword:

-

Relevant legal provisions:

EPC Art. 54, 56

Keyword:

"Novelty (yes)"
"Inventive step (yes)"

Decisions cited:

-

Catchword:

-



Case Number: T 0741/99 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 21 July 2000

Appellant: BSH Bosch und Siemens Hausgeräte GmbH
(Opponent) Postfach 100250
D-80076 München (DE)

Representative: -

Respondent: Koninklijke Philips Electronics N.V.
(Proprietor of the patent) Groenewoudseweg 1
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Representative: Cuppens, Hubertus Martinus Maria
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 7 May 1999
rejecting the opposition filed against European
patent No. 0 546 620 pursuant to Article 102(2)
EPC.

Composition of the Board:

Chairman: C. A. J. Andries
Members: R. E. Gryc
R. E. Teschemacher

Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal, received at the EPO on 16 July 1999, against the decision of the Opposition Division (dispatched on 7 May 1999) rejecting the opposition against the European patent EP-B-0 546 620.

The appeal fee was paid simultaneously and the statement setting out the grounds of appeal was received at the EPO on 16 September 1999.

II. The opposition was filed against the patent as a whole on the ground of lack of inventive step (Article 100(a) EPC) of the subject-matter of the claims in view of the following prior art documents:

D1: WO-A-90/06076

D2: DE-A-3 017 072

D3: DE-A-2 923 588 (cited in the opposed patent) and

D4: manual "Gebrauchsanweisung" of the Siemens vacuum cleaner "Super 91 Electronic",
M 610.43440/01 029120.0.

The Opposition Division held that the ground for opposition did not prejudice the maintenance of the patent unamended and rejected the opposition.

III. With his statement setting out the grounds of appeal, the appellant filed the following additional documents:

D5: EP-A-0 285 801 and

D6: copy of a voucher (Versandanweisung) dated 16 May 1991 concerning the delivery of a Siemens vacuum cleaner "VS 912" to Mr Gerhard Möller.

The appellant contended that, in view of D4 or D5, it was not inventive for the skilled person to position the indicating means on the nozzle part of the vacuum cleaner described in D3 because both documents D4 and D5 teach to locate visual means at a place where they can be easily observed by the operator (i.e. on the handle of the device) and it is common general knowledge that, during cleaning the floor, the area around the nozzle part remains continuously in the field of view of the operator.

The respondent (patentee) argued that the person skilled in the art confronted with the problem as defined in the opposed patent would not be attracted by the teaching of D5 since D5 concerns a problem of a completely different nature.

As regards D4, the respondent contended that it was not proven that this document was enclosed in the parcel for the vacuum cleaner "VS 912" delivered in May 1991 to Mr G. Möller.

He also pointed out that even if D4 was publicly available before the priority date of the opposed patent, this document would not provide more information than the disclosure of document US-A-4 601 082 (D7) cited in the search report and already considered by the Examining Division.

IV. In a communication sent to the parties in order to prepare the planned oral proceedings, the Board gave a provisional opinion according to which the closest state of the art appeared to be disclosed in D7 and the subject-matter of Claim 1 seemed to be new and inventive over the cited prior art.

V. Oral proceedings took place on 21 July 2000.

The appellant did not dispute novelty but contended that, for the skilled person, the subject-matter of Claim 1 was not inventive over the teachings of D1, D2 and D7 which all gave the hint of moving the indicating means of a vacuum cleaner towards the visible field of the operator and, in particular as in D7, from the body of the device in direction to the nozzle.

The appellant was of the opinion that, in the period preceding the priority date, there was a tendency in the state of the art for changing the location of the indicating means from the usual position on the body of the vacuum cleaner to a position which can be observed easily by the operator.

The appellant also argued that, the positioning of the indicating means on the handle being already known, for example from D7, and the usual practice of the skilled person being to improve more and more the technique, as a natural consequence he would find that the best location for the indicating lamps to fall under the eyes of the operator would be on the nozzle of the vacuum cleaner.

Moreover, the appellant was of the opinion that such a location would not be more convenient and would not bring an advantage compared to the position on the handle disclosed in D4, D5 and D7, the new location proposed by the invention being simply an alternative to the already known position.

The appellant also contended that the skilled person had only three possible locations i.e. on the body, on the handle and on the nozzle, and since two were already used (body and handle), the skilled person had no other choice as to select the nozzle. Therefore, according to the appellant, to make this choice did not imply an inventive step in the meaning of Article 56 EPC.

The respondent contradicted the argumentation of the appellant and pointed out that, in the state of the art, it has never been taught or even suggested to locate the indicating means on the nozzle and that, the problem solved by the invention does not concern solely for the operator to avoid changing his angle of vision as suggested in D4 or D7 but also to avoid accommodating his eyes to a smaller distance (i.e the distance between his eyes and the handle) than the distance between his eyes and the floor where he is looking at.

According to the respondent, the invention could not be considered simply as an alternative to the existing means but should be considered as an improvement to said means since it takes account of not only the angle of vision of the operator but also the distance of vision.

The respondent also emphasized that since it is more complicated to locate electrical indicating means on the nozzle of a vacuum cleaner than on the handle , the skilled person would have not been disposed to choose the first position. Moreover, the respondent drew the attention to the fact that, on the already known vacuum cleaner, the visual means for indicating the power steps were always located close to the motor itself i.e. on the body of the vacuum cleaner and never on the handle.

- VI. At the end of the oral proceedings, the appellant (opponent) requested that the decision under appeal be set aside and that the European patent EP-B-0 546 620 be revoked.

The respondent (patentee) requested that the appeal be dismissed and that the patent be maintained as granted.

- VII. Claim 1 as granted reads as follows:

"An electric vacuum cleaner comprising a body incorporating a motor, a control circuit for controlling the power of the motor, a plurality of indicating lamps for indicating the power of the motor in steps, a hose part which is connected to the body, a grip part which is connected to the hose part and is provided with a grip connecting part, an extension pipe connected to the grip connecting part, and a nozzle part with a nozzle pipe connected to the extension pipe, characterized in that the indicating lamps are provided on the nozzle part."

Reasons for the Decision

1. *Admissibility of the appeal*

The appeal is admissible.

2. *Novelty (Article 54 EPC)*

None of the prior art documents D1 to D7 discloses a vacuum cleaner of the type having a body, a hose part, a grip part, an extension pipe and a nozzle part provided with a plurality of indicating lamps for indicating the power of the motor in steps, as claimed in Claim 1. Therefore, the subject-matter of Claim 1 is new in the meaning of Article 54 EPC.

3. *The closest state of the art*

D7 relates to vacuum cleaners of the type comprising all the features of the precharacterising portion of Claim 1 and it is concerned with the problem of providing the operator with indicating means arranged at a conspicuous place (see D7: column 2, lines 5 to 10) where they can easily be observed by the user during cleaning the floor (see also from column 5, line 67 to column 6, line 5).

For these reasons the Board considers that the disclosure of D7 embodies the state of the art closest to the invention.

However, the vacuum cleaner claimed in Claim 1 differs from said state of the art in that the indicating lamps for indicating the power of the motor in steps are not provided on the body housing the motor as according to D7 (see the "visual display of the power steps 27"-column 4, lines 59 to 62 and Figure 1) but on the nozzle part.

4. *Problem and solution*

Starting from said closest state of the art and taking into account the difference mentioned in section 3 above, the Board sees the problem as to render the apparatus known from D7 still more convenient to use (see the opposed patent: column 1, lines 20 to 30).

The Board is satisfied that the solution according to the invention brings effectively a solution to this problem by allowing the operator, during cleaning the floor, to keep the indicating means continuously in his field of view without the latter having to change not only the angle but also the distance of vision.

5. *Inventive step (Article 56 EPC)*

- 5.1 The person skilled in the art wishing to improve the vacuum cleaner of D7 in order to facilitate its use would learn from this document: "that the mostly optical indicating means,....., can likewise be arranged at a suitable point in the area of the handle so that the changing indications can easily be observed by the operator during operation of the vacuum cleaner" (see D7: from column 5, line 67 to column 6, line 5).

However, it should be noted that, in D7, this recommendation obviously does not concern the visual display of the power steps which, in the form of a light strip 27, remains located close to the motor i.e. on the housing of the vacuum cleaner (see D7: column 4, lines 59 to 62 and Figure 1).

- 5.2 D1 describes an upright vacuum cleaner (see D1: page 4, line 10 and page 6, first sentence), i.e. a vacuum cleaner of a different type as that according to the invention and the problem at the basis of the invention is neither mentioned nor even suggested in D1 which is concerned with a problem of a completely different nature (see D1: page 2, first paragraph). Moreover, on this type of vacuum cleaner, all the different parts of the apparatus are assembled together so as to form a unit as illustrated on Figure 2 which shows the suction nozzle (12) attached to the motor enclosure (11) which, itself, lodges the motor and the fan. When cleaning the floor, the operator normally pushes in front of him the complete unit which, therefore, remains constantly in his field of view. With such an upright vacuum cleaner, the problem at the basis of the invention thus does not exist and the skilled person confronted with said problem on a vacuum cleaner having a nozzle separated from the body would have a priori absolutely no reason to consult D1. And even if he did it, he would learn from D1 that, on an upright vacuum cleaner, indicators for indicating brush rotation and the best suction condition could be mounted on the nozzle but, about a possible location for indicating lamps for indicating the power of the motor in steps, he would not learn anything.

- 5.3 Also D2 is not concerned with a vacuum cleaner of the type according to the invention and the only provided "indicating means" (Signalfeld 14 oder 15), for indicating that the tool 26 should be changed, are mounted on the body of the apparatus. Therefore, the argumentation regarding D1 mentioned in section 5.2 above remains valid as far as D2 is concerned.
- 5.4 D3 discloses a vacuum cleaner of the same type as that claimed in Claim 1 but, contrary to the invention, this document teaches to mount on the body of the vacuum cleaner the LED lamp for indicating the power steps associated to the switch 12 (see D3: page 6, 2nd paragraph and Figures) and nothing in the disclosure even suggests to locate such an indicating means on the nozzle.
- 5.5 The other two prior art documents D4 and D5 relating to vacuum cleaners of the same type as the apparatus claimed in Claim 1 teach to mount on the handle of the vacuum cleaner lamps for indicating the need of a filter change but they do not even envisage that such means could possibly be located on the nozzle, let alone means for indicating the power steps of a motor which is housed in the body i.e. at the extremity opposite to the nozzle of the chain formed by all the elements of the vacuum cleaner joined end to end (i.e. body with motor, flexible hose, handle, rigid pipe and nozzle).
- 5.6 Therefore, in the specific field of this type of wheel-mounted vacuum cleaners where the problem can solely arise, the trend is to locate the means for indicating the power steps close to the motor (see D3 and D7) and

the other indicating means preferably in the area of the handle (see D4, D5 and also D7), the idea of locating visual indicating means on the nozzle part itself being neither described nor even suggested in the prior art documents.

The skilled person wishing to improve the vacuum cleaner of D7 might possibly get the idea of gathering all the display means on the handle (i.e. not only the visual indicating means 18a and 18b but also the visual display 27) but he would have no particular reason to locate these means on the part of the device which is the farthest away from the eyes of the operator and also from the motor.

Additionally, during cleaning the floor, the suction nozzle is the part of the vacuum cleaner which is the most exposed to shocks against the furniture and the walls and, a priori, without any further hint or necessity, the skilled person would not be inclined to position brittle optical means, let alone small electrical lamps, at such an exposed location.

- 5.7 Therefore, the Board considers that to transfer the position of the visual display of the power steps of the vacuum cleaner according to D7 from the body to the suction nozzle so as to arrive at the subject-matter of Claim 1 does not follow plainly and logically from the state of the art and thus implies an inventive step within the meaning of Article 56 EPC.

6. *Conclusion*

For the foregoing reasons, the grounds for opposition do not prejudice the maintenance of the European patent

No. 0 546 620 as granted.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Magouliotis

C. Andries