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D E C I S I O N  
of 18 November 2002

Case Number: T 0471/01 - 3.2.4

Application Number: 93304750.8

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IPC: A47L 9/08

Language of the proceedings: EN

Title of invention:  
Collection devices

Patentee:  
ELECTROLUX OUTDOOR PRODUCTS LIMITED

Opponent:  
Electrostar Schöttle GmbH & Co.

Headword:  
-

Relevant legal provisions:  
EPC Art. 56, 100(a), R. 71(2)

Keyword:  
"Inventive step (yes)"

Decisions cited:  
-

Catchword:  
-



Case Number: T 0411/01 - 3.2.4

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.4  
of 18 November 2002

**Appellant:** Electrostar Schöttle GmbH & Co.  
(Opponent) Stuttgarter Strasse 36  
D-73262 Reichenbach (DE)

**Representative:** KOHLER, SCHMID + PARTNER  
Patentanwälte  
Ruppmannstrasse 27  
D-70565 Stuttgart (DE)

**Respondent:** ELECTROLUX OUTDOOR PRODUCTS LIMITED  
(Proprietor of the patent) Preston Road  
Aycliffe Industrial Estate  
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**Representative:** Wright, Howard Hugh Burnby  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 22 February 2001  
rejecting the opposition filed against European  
patent No. 0 587 272 pursuant to Article 102(2)  
EPC.

**Composition of the Board:**

**Chairman:** C. A. J. Andries  
**Members:** C. D. A. Scheibling  
C. Holtz

## Summary of Facts and Submissions

- I By its decision dated 22 February 2001 the Opposition Division rejected the opposition. On 4 April 2001 the appellant (opponent) simultaneously filed an appeal, a statement setting out the grounds of appeal and paid the appeal fee.
- II The patent was opposed on the ground based on Article 100(a) (Article 56) EPC.
- III. The document D1: EP-A-0 443 882 played an essential role in the appeal proceedings.
- IV. Oral proceedings took place on 18 November 2002. Although duly summoned the respondent (patentee) did not appear. According to the provisions of Rule 71(2) EPC the proceedings were continued without it. The patentee informed the Board with a letter dated 18 October 2002 that it would not participate in the oral proceedings.
- V. The appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked.

The respondent (patentee) requested that the appeal be dismissed.

- VI. Independent claim 1 as granted reads as follows:

"1. Apparatus for collecting material from a surface, the apparatus comprising:  
a duct (D) for directing material entrained in a stream of pressurised air from a collection mouth (CM) at an upstream end of the duct (D) to a downstream region (DS) of the duct (D) for collection;

at least one primary air inlet (I) opening into the duct (D) for delivering pressurised air into the duct (D) in a generally downstream direction to form a primary air stream, the delivery of the primary air stream into the duct (D) inducing a flow of ambient air into the duct through the collection mouth (CM), the flow of ambient air serving to entrain material from the surface and transport the material from the collection mouth (CM) to the downstream region (DS) for collection,

at least one secondary air outlet (SO) for delivering pressurised air externally of the apparatus to form a first stream of secondary air directed onto an area of the surface confronting the collection mouth (CM), the first stream of secondary air serving to dislodge material disposed on the said confronting area for entrainment in the flow of ambient air,

at least one additional secondary air outlet (SO2) disposed to direct a second stream of secondary air externally of the apparatus towards the surface at a position displaced from the area of the surface confronting the collection mouth (CM); and  
a control valve (V) for selectively controlling flow of primary and secondary air from: (i) the primary air inlet (I); (ii) the secondary air outlet (SO); and (iii) the additional secondary air outlet (SO2), the control valve (V) having a first operating position in which pressurised air is permitted to flow through at least the primary air inlet (I) while disabling the flow of pressurised air through the additional secondary air outlet (SO2), and a second operating position in which pressurised air is permitted to flow through the additional secondary air outlet (SO2) while disabling the flow of pressurised air through the primary air inlet (I)".

## Reasons for the Decision

1. The appeal is admissible.
2. *Interpretation of the independent claim 1*

From the whole of the patent in suit, it is clear for a person skilled in the art, that in the meaning of the patent "a secondary air outlet" is an aperture that is physically separated from "the primary air inlet".

According to the Webster's Revised Unabridged Dictionary (1913) (Internet site [www.dict.org](http://www.dict.org)) "to disable" means to render unable or incapable, to incapacitate. Thus, in the meaning of the patent in suit "disabling the flow of pressurised air" has to be interpreted as meaning "to render the pressurised air unable to flow through the air passage".

3. *Novelty*

Novelty was neither a ground for opposition nor raised during the appeal proceedings.

4. *Closest prior art*

- 4.1 The Board, in agreement with the appellant, considers D1 to be the closest prior art document.

- 4.2 From D1 (column 3, line 59 to column 4, line 47; Figures 1 to 3) there is known an apparatus for collecting material from a surface, the apparatus comprising:

a duct (3) for directing material entrained in a stream of pressurised air from a collection mouth (7) at an upstream end of the duct (3) to a downstream region of

the duct (3) for collection;  
at least one primary air inlet (23, 25) opening into the duct (3) for delivering pressurised air into the duct (3) in a generally downstream direction (due to the boundary layer effect) to form a primary air stream, the delivery of the primary air stream into the duct (3) induces a flow of ambient air into the duct through the collection mouth (7), the flow of ambient air serving to entrain material from the surface and transport the material from the collection mouth (7) to the downstream region for collection,

at least one additional secondary air outlet (32a) disposed to direct a stream of secondary air externally of the apparatus towards the surface at a position displaced from the area of the surface confronting the collection mouth (7); and

a control valve (32) for selectively controlling flow of primary and secondary air from the primary air inlet (23) and the additional secondary air outlet (32a), the control valve (32) having a first operating position in which pressurised air is permitted to flow through the primary air inlet (23) while disabling the flow of pressurised air through the additional secondary air outlet (32a), and a second operating position in which pressurised air is also permitted to flow through the additional secondary air outlet (32a).

5. *Inventive step*

5.1 The apparatus according to claim 1 in suit differs from that of D1 in that:

it further comprises at least another secondary air outlet for delivering pressurised air externally of the apparatus to form a further stream of secondary air directed onto an area of the surface confronting the

collection mouth, this further stream of secondary air serving to dislodge material disposed on the said confronting area for entrainment in the flow of ambient air,

the control valve also controls the other secondary air outlet, and when in it's second operating position in which pressurised air is permitted to flow through the additional secondary air outlet, the control valve disables the flow of pressurised air through the primary air inlet.

These features make this apparatus operable either upon a suction principle for collecting material, including means for dislodging material from a surface to assist in the collection thereof or upon a blower principle.

- 5.2 The problem to be solved therefore is to provide an apparatus for collecting material from a surface in an effective manner.
- 5.3 This problem is solved by providing a valve selectively controlling the flow of the air between a collecting operating position and a blowing operating position and by providing at least a further valve controlled secondary air outlet, for delivering pressurised air externally of the apparatus to form a first stream of secondary air directed onto an area of the surface confronting the collection mouth, this first stream of secondary air serving to dislodge material disposed on the said confronting area for entrainment in the flow of ambient air during the collecting operation.
- 5.4 The appellant argued that the apparatus according to claim 1 of the patent in suit solely differs from the apparatus of D1 in that it comprises a further separate secondary air outlet; that the problem to be solved is to improve effectiveness of the air stream serving to

dislodge material from the surface to be cleaned; and that it would be obvious for a skilled person to provide such a further separate outlet in order to solve this problem.

However, the Board cannot agree to this analysis, since in the view of the Board the apparatus according to claim 1 does not differ from the apparatus of D1 only by the additional separate secondary outlet but by all the features listed in section 5.1 above.

5.5 The appellant argued that the device of D1 also performs the function of the secondary air outlet of the patent in suit. In the appellant's view, in D1 (column 2, lines 39 to 44 and column 4, lines 12 to 18) the outlet 23 delivers pressurised air externally of the apparatus to form a first stream of secondary air (called the "remainder" of air flow in D1) which is directed onto an area of the surface confronting the collection mouth, because it is "disturbing any loose material located beneath the collection mouth 7", and that therefore, said "remainder" of air flow can also be said to serve to dislodge material disposed on the said confronting area for entrainment in the flow of ambient air.

The Board is not convinced that D1 discloses a stream of air directed onto an area of the surface confronting the collection mouth and serving to dislodge material. As a matter of fact, in the passage of D1 (column 4, lines 10 to 18) cited by the appellant and referring to the specific embodiment as represented in the figures, it is indicated that "the major part of the air flow from each outlet 23, 25 follows the profile of the respective curved surface 27, 29 into the duct 3, the remainder disturbing any loose material located beneath the collecting mouth 7 and facilitating entrainment of this loose material ...". The Board notes that



according to D1 the "remainder" of the air flow which is, according to the appellant, to be compared with the first stream of secondary air is produced by outlet (23) as well as by outlet (25). When referring now to Figure 3 of D1, although outlet (23) is directed parallel to the surface to be cleaned and is thus not directed onto that surface, outlet (25) is clearly directed upwardly towards the downstream region for collection. Thus, also the air flow delivered by outlet (25) is not directed onto the area of the surface confronting the collection mouth, even if admitting as stated by the appellant that once it has left the outlet, the air flow diverges. However, according to D1 both outlets provide the "remainder" of air flow in order to disturb any loose material. Thus, the simple fact that the "remainder" of the air flow is able to disturb loose material located beneath the collection mouth cannot lead to the conclusion that said air flow is directed onto an area of the surface confronting the collection mouth. Moreover D1 does neither disclose a separate secondary air outlet nor can it suggest to a skilled person to provide any separate secondary air outlet, since D1 does not even disclose a corresponding air flow.

- 5.6 The appellant also argued that to "disable" means to "render inactive" not to "close physically the outlet" and that the flap (32) of D1 is a valve in the sense of the patent in suit providing the same effect.

The Board cannot agree to this point of view either. As stated in section 2 above, "disabling the flow of pressurised air" has to be interpreted as meaning "to make the air unable (incapable) to flow through the air passage". This, however, is not the case in D1. In D1, as can be clearly seen in Figure 2, the outlet (32a) does not extend over the entire width of collection head (5) (and thus of outlet 23). In fact, outlet (32a)

is very small in comparison with outlet (23) and therefore will not be able to prevent all the air flow conveyed in duct (13) from reaching outlet (23), all the more because of the presence of the baffles (33) which divide and direct said air flow quite upstream of the outlet (32a), guiding part of the air flow so as to bypass the outlet (32a). Furthermore, outlet (32a) does not have any influence at all on the air flow conveyed by duct (15) and exiting through outlet (25) which is not affected directly in any way by any possible operating position of the valve (flap 32).

The appellant further argued that according to D1 column 4, lines 58, 59 "one or other outlets could be omitted or blanked off, as desired", which means that other embodiments without a second outlet (25) are also contemplated. However, solely the embodiment comprising two outlets (23 and 25) is disclosed in the description and figures in a complete manner and there is no indication what kind of blower outlet an embodiment with a single outlet would comprise or what such an embodiment would look like.

As a matter of fact, the appellant proposes to modify the apparatus of D1 by selecting features within the limits of the possible alternatives offered in D1 such as to come close to an apparatus according to claim 1 of the patent in suit, without indicating why a skilled person would proceed in the proposed manner. This manner of proceeding however is nothing else but the result of an *ex post facto* analysis.

It should also be emphasized that, whereas the patent in suit discloses two operating modes, which are independent from each other, namely a suction mode and a blow mode, D1 permanently has a suction mode only (see also claim 1 of D1).

Thus the Board concludes that the valve (flap 32) of D1

does not disclose nor suggest a second operation position disabling the flow of pressurised air through the primary air inlet and thus that in D1 the secondary air outlet is not controlled by said valve in the meaning of the patent in suit.

5.7 Consequently, the Board comes to the conclusion that the subject-matter of claim 1 of the patent in suit involves an inventive step.

**Order**

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

The appeal is dismissed.

The Registrar:



G. Magouliotis

The Chairman:



C. Andries



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