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Datasheet for the decision of 11 August 2014

Case Number: T 1517/11 - 3.2.07

Application Number: 09000516.6

Publication Number: 2062653

IPC: B05B7/08

Language of the proceedings: EN

Title of invention:
A spray gun

Applicant:
Finishing Brands UK Limited

Headword:

Relevant legal provisions:
EPC Art. 54(1)

Keyword:
Novelty - main and auxiliary requests (no)

Decisions cited:
T 0164/92, T 0582/93, T 1849/08, T 0447/92, T 0998/95, T 0722/00

Catchword:

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Case Number: T 1517/11 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 11 August 2014

Appellant: (Applicant)	Finishing Brands UK Limited Ringwood Road Bournemouth, Dorset BH11 9LH (GB)
Representative:	Townsend, Victoria Jayne Fry Heath & Spence LLP The Gables Massetts Road Horley Surrey RH6 7DQ (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 3 March 2011 refusing European patent application No. 09000516.6 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	H. Meinders
Members:	G. Patton
	I. Beckedorf

Summary of Facts and Submissions

I. The applicant (appellant) lodged an appeal against the decision of the Examining Division to refuse the European patent application No. 09 000 516.6.

II. The following document considered in the impugned decision is referred to:

D2: GB-A-438 302

III. According to the impugned decision, the subject-matter of claim 1 of the application as originally filed, i.e. the then only request on file, was lacking inventive step in view of D2 and the common general knowledge of the skilled person.

IV. With the statement of grounds of appeal dated 23 June 2011 the appellant maintained this request, based on the set of claims of the application as originally filed, supplemented by an auxiliary request.

V. In the annex to the summons to oral proceedings (hereafter called the annex) the Board presented its preliminary non-binding opinion that the subject-matter of the claims 1 of the main and auxiliary requests were regarded as lacking novelty, among others over D2.

VI. Oral proceedings took place on 11 August 2014 during which novelty of the subject-matter of claim 1 according to the main request (application as filed) over *inter alia* document D2 was discussed.

At the oral proceedings the appellant stated that, in view of the discussion concerning the main request, it did not wish to add anything further in respect of the

issue of novelty of the subject-matter of claim 1 according to the auxiliary request.

The Board announced its decision at the end of the oral proceedings.

VII. The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of either the set of claims as originally filed (main request) or, alternatively, the set of claims filed as auxiliary request with letter of 23 June 2011.

VIII. Independent claim 1 of the main request reads as follows:

"A spray gun comprising a main body (2), a spray head (6), an inlet for a liquid to be sprayed, and an inlet (10) for a supply of a compressed air;
the spray head comprising an air cap (40), a hollow nozzle member (36) having a nozzle tip (46) for dispensing the liquid, and means (58) for securing the air cap and nozzle member to the main body;
the air cap (40) having a central aperture (52) through which atomising air is directed to atomise liquid dispensed through the nozzle tip to form a spray, and one or more lateral apertures (56) through which fan air is directed for shaping the spray to a desired pattern;
a pair of openings (92, 94) provided in a surface (51) of the main body for introducing compressed gas from the supply inlet into an air distribution chamber (53) for receiving and distributing compressed air from the supply inlet (10) the air distribution chamber (53) bounded by a radially extending weir (48) of the hollow nozzle member (36), an opposing surface (51) of the main body and an annular wall of the main body

extending between the opposing surfaces of the weir (48) and the main body;
characterised by an annular sealing member (38) of unitary construction having an annular wall which is sealingly disposed between the openings (92,94) and which bridges a space between the radially extending weir (48) and the said surface (51) of the main body so as to divide the air distribution chamber (53), whereby air passing into the chamber (53) through first opening (94) to one side of the annular wall is directed to the central aperture (52) of the air cap (40) and air passing into the chamber (53) through second opening (92) to the other side of the annular wall is directed to the lateral apertures (56) of the air cap (40) thereby providing both a partitioning and sealing function in one component and avoiding the requirement for a separate sealing member."

Independent claim 1 of the auxiliary request reads as follows (in bold the amendments as compared to claim 1 of the main request; emphasis added by the Board):

"A spray gun comprising a main body (2), a spray head (6), an inlet for a liquid to be sprayed, and an inlet (10) for a supply of a compressed air;
the spray head comprising an air cap (40), a hollow nozzle member (36) having a nozzle tip (46) for dispensing the liquid, and means (58) for securing the air cap and nozzle member to the main body;
the air cap (40) having a central aperture (52) through which atomising air is directed to atomise liquid dispensed through the nozzle tip to form a spray, and one or more lateral apertures (56) through which fan air is directed for shaping the spray to a desired pattern;

a pair of openings (92, 94) provided in a surface (51) of the main body for introducing compressed gas from the supply inlet into an air distribution chamber (53) for receiving and distributing compressed air from the supply inlet (10),
characterised in that the air distribution chamber (53) **is** bounded by a radially extending weir (48) of the hollow nozzle member (36), an opposing surface (51) of the main body and an annular wall of the main body extending between the opposing surfaces of the weir (48) and the main body;
and further characterised by an annular sealing member (38) of unitary construction having an annular wall ~~**which is sealingly disposed between the openings (92,94) and**~~ which bridges ~~**a**~~ **the** space between the radially extending weir (48) and the said surface (51) of the main body so as to divide the air distribution chamber (53) **and which is sealingly disposed against the main body between the openings (92,94) and against the radially extending weir**, whereby air passing into the chamber (53) through first opening (94) to one side of the annular wall is directed to the central aperture (52) of the air cap (40) and air passing into the chamber (53) through second opening (92) to the other side of the annular wall is directed to the lateral apertures (56) of the air cap (40) thereby providing both a partitioning and sealing function in one component and avoiding the requirement for a separate sealing member."

IX. The arguments of the appellant are essentially as follows:

Main request

Ring (35) in figure 1 of D2 is a component of the main body serving to define the downstream openings (38, 41) which then equate to the claimed openings (92, 94).

The hollow nozzle member in the spray gun of D2 is the nozzle (36) which does not comprise a radially extended weir as claimed. In D2, the weir belongs to the cap (31) which is part of the main body, it does not belong to the hollow nozzle member (36). A strict approach must be taken when assessing novelty and the content of a prior publication must be interpreted narrowly. Consequently, novelty has to be acknowledged.

First auxiliary request

Claim 1 of the auxiliary request is novel over D2 for the same reasons as for claim 1 of the main request.

Reasons for the Decision

1. Main request

1.1 What follows as analysis of D2 has been communicated to the appellant in the Board's annex to the summons, the latter making reference to an annotated part of figure 1 of D2.

D2 (page 4, line 45 to page 5, line 16; figures 1-2) discloses a spray gun comprising a main body ("frame" 1), a spray head, an inlet ("duct" 3) for a liquid to be sprayed, and an inlet ("duct" 9a) for a supply of a compressed air;

the spray head comprising an air cap (18), a hollow nozzle member ("nozzle" 36 and "cap" 31 secured together by a threaded connection so as to build up one

component) having a nozzle tip for dispensing the liquid, and means ("flange" 32 of part 31, "lock ring" 37) for securing the air cap and nozzle member to the main body;

the air cap (18) having a central aperture (40) through which atomising air is directed to atomise liquid dispensed through the nozzle tip to form a spray, and one or more lateral apertures (43) through which fan air is directed for shaping the spray to a desired pattern;

a pair of openings (17, 19) provided in a surface (51) of the main body for introducing compressed gas from the supply inlet into an air distribution chamber (29, 30) for receiving and distributing compressed air from the supply inlet (9a), the air distribution chamber (29, 30) bounded by a radially extending weir (the radial extent of cap 31 between the nozzle 36 and the flange 32) of the hollow nozzle member (31, 36), an opposing surface (the inward radially extending annular surface of air chamber 29, 30) of the main body (1) and an annular wall of the main body extending between the opposing surfaces of the weir and the main body.

The spray gun of D2 comprises an annular sealing member ("ring" 35) of unitary construction having an annular wall which is sealingly disposed between the openings (17, 19) and which bridges a space between the radially extending weir and the said surface of the main body so as to divide the air distribution chamber (29, 30), whereby air passing into the chamber (29, 30) through first opening (17) to one side of the annular wall is directed to the central aperture (40) of the air cap (18) and air passing into the chamber (29, 30) through second opening (19) to the other side of the annular

wall is directed to the lateral apertures (43) of the air cap (18).

The annular sealing member ("ring" 35) of the spray gun of D2 provides both a partitioning and sealing function in one component and avoids the requirement for a separate sealing member.

Therefore, the subject-matter of claim 1 lacks novelty over D2 (Article 54(1) EPC).

1.2 The Board does not concur with the examining division (impugned decision, points 5.1 and 5.2) that the claimed spray gun differs from the gun disclosed in D2 in that the latter has the pair of openings (17, 19) provided in different surfaces of the air distribution chamber. This is an interpretation of claim 1 which is not warranted by its wording. Indeed, claim 1 does not specify any requirement on the surface, e.g. to be flat, it merely requires the pair of openings to be provided in "a surface" of the main body. This can just as well be the "inner surface" in the main body. The two openings (17, 19) in D2 are in fact provided in such an inner surface of the chamber (29, 30), i.e. one and the same surface. The fact that the claim further specifies an opposing surface with the same reference sign (51) as for the surface in which the openings are provided does not restrict the latter to be flat. Reference signs are not to be construed as limiting (Rule 43(7) EPC), so that the surface need not be continuous.

This is all the more true since the openings (92, 94) in the spray gun of the present application (see figures 3 and 4) are not provided in a flat or continuous surface either. The opening (94) for the

atomisation air is provided in the bottom surface of recess (51a) while the opening (92) for the fan air is provided in a more downstream part of the opposing surface (51).

This has not been contested by the appellant, neither in writing nor orally during the oral proceedings.

1.3 In its written submissions, the appellant considers that the ring (35) in the device of D2 is a component of the main body serving to define the downstream openings (38, 41) which then equate to the claimed openings (92, 94).

As put forward in the annex, the Board cannot share this view and concurs with the examining division (impugned decision, point 3.2.1) that the upstream openings (17, 19) equate to the claimed openings (92, 94), not the further downstream openings (38, 41) as put forward by the appellant. The baffled collar (unreferenced) shown in figure 1 of D2 is not the annular sealing member within the meaning of claim 1, but ring (35).

This has not been further contested by the appellant during the oral proceedings.

1.4 The further distinguishing feature of claim 1 of the main request over D2 as put forward by the appellant during the oral proceedings is that **the weir belongs to cap (31) in D2, not to the hollow nozzle member (36).** The appellant considers that cap (31) and hollow nozzle member (36) are two distinct parts in the spray gun of D2. Since cap (31) cannot be "...of the nozzle member" as it is part of the main body to which it is secured, the skilled reader would understand that the hollow

nozzle member (36) in the spray gun of D2 does not comprise a radially extending weir as claimed. Consequently, novelty has to be acknowledged on the basis of this feature.

The appellant argues that the disclosure of a prior art document is determined by the knowledge and understanding which can and may be expected of the average skilled person in the technical field in question (T 164/92, published in EPO OJ 1995, 305; T 582/93 and T 1849/08, not published in EPO OJ).

In the present case the appellant is of the opinion that the skilled reader would understand the hollow nozzle member in the spray gun of D2 being only formed by the nozzle (36). Since a strict approach must be taken when assessing novelty and, in cases of ambiguity or doubt, the content of a prior publication must be interpreted narrowly, novelty should be acknowledged since the nozzle (36) does not exhibit a weir as claimed (T 447/92, T 998/95 and T 722/00, not published in EPO OJ) (see Case Law of the Boards of Appeal, 7th Edition 2013, I.C.3, I.C.3.1 and I.C.4.1).

1.5 The Board fully agrees with the cited decisions regarding the strict interpretation of the prior art when assessing novelty. However, it cannot share the appellant's view that the mentioned feature distinguishes the claimed subject-matter from the disclosure of D2.

Indeed, it is not excluded from claim 1 that **the hollow nozzle member be made up of several parts**, e.g. in two parts (31, 36) like in D2. As admitted by the appellant during the oral proceedings, a hollow nozzle member as a unitary part is not specified in claim 1.

The board considers that the expression used in claim 1 of "hollow nozzle **member**" does not limit the part to simply a nozzle as argued by the appellant (the "member" can consist of two parts). Therefore, when interpreting D2 in view of claim 1, the skilled person will not restrict himself to only examine whether the nozzle (36) has a weir, but rather whether D2 discloses a member involving a nozzle (36) comprises a weir, i.e. parts (31) and (36) fixed together.

The passage of D2, page 2, lines 44-58, to which the appellant refers in its written submissions does not contradict the above view.

Finally, claim 1 does not specify how the nozzle member is to be mounted and secured on the main body so that the construction of D2, the hollow nozzle member (31, 36) being mounted on the main body via the threaded flange (32), is also not excluded. It is noted that the hollow nozzle member (36) shown in figure 4 of the present application is also secured by a threaded connection (42) onto the main body, while still not being regarded as being part of the main body.

1.6 The further arguments of the appellant at the oral proceedings related to inventive step and are therefore moot in a situation where the subject-matter of claim 1 is not novel over D2.

2. Auxiliary request

2.1 Claim 1 of the auxiliary request differs in substance from claim 1 of the main request in that the annular wall of the annular sealing member (38) (see point VIII above):

- **bridges the space** between the radially extending weir (48) and the said surface (51) of the main body; and
- is sealingly disposed **against the main body and against the radially extending weir**.

2.2 D2, figure 1, discloses that the annular sealing member (35) bridges **the complete space** between the radially extending weir and the surface of the main body, as discussed in point 1.1 above, so as to divide the air distribution chamber (29, 30) and is sealingly disposed by **direct contact** against the main body between the openings (23, 24) on one side and against the radially extended weir on the other side. There is no gasket in the spray gun of D2 for the partitioning and sealing functions of the annular sealing member (35).

Therefore, in view of the disclosure of D2 discussed under point 1 above with respect to claim 1 of the main request, the subject-matter of claim 1 of the auxiliary request also lacks novelty over D2 (Article 54(1) EPC).

2.3 During the oral proceedings, the appellant admitted that no feature of claim 1 of the auxiliary request would render its subject-matter novel over D2 other than those already discussed for the main request.

Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar: The Chairman:

G. Nachtigall H. Meinders

Decision electronically authenticated