

**Internal distribution code:**

- (A) [ ] Publication in OJ  
(B) [ ] To Chairmen and Members  
(C) [X] To Chairmen

**D E C I S I O N**  
**of 10 May 2000**

**Case Number:** T 0169/97 - 3.2.4

**Application Number:** 91300771.2

**Publication Number:** 0440477

**IPC:** B65B3/12

**Language of the proceedings:** EN

**Title of invention:**  
Aerosol can filler

**Patentee:**  
Ray, George

**Opponent:**  
Leonard Brooks Distribution Limited

**Headword:**  
Aerosol can/RAY

**Relevant legal provisions:**  
EPC Art. 54, 56, 112, 114

**Keyword:**  
"Public prior use (not proved)"  
"Request for referral to the Enlarged Board of Appeal  
(refused)"  
"Inventive step (yes)"

**Decisions cited:**  
T 0472/92

**Catchword:**  
-



Case Number: T 0169/97 - 3.2.4

**D E C I S I O N**  
**of the Technical Board of Appeal 3.2.4**  
**of 10 May 2000**

**Appellant:** Leonard Brooks Distribution Limited  
(Opponent) Paint Works, Oak Road  
Harold Wood  
Essex RM3 0PL (GB)

**Representative:** W.P. Thompson & Co.  
Eastcheap House  
Central Approach  
Letchworth  
Hertfordshire SG6 3DS (GB)

**Respondent:** Ray, George  
(Proprietor of the patent) Green Lane  
Chessington  
Surrey (GB)

**Representative:** Adams, William Gordon  
RAWORTH, MOSS & COOK  
36 Sydenham Road  
Croydon  
Surrey CR0 2EF (GB)

**Decision under appeal:** Interlocutory decision of the Opposition Division  
of the European Patent Office posted 16 December  
1996 concerning maintenance of European patent  
No. 0 440 477 in amended form.

**Composition of the Board:**

**Chairman:** C. A. J. Andries  
**Members:** P. Petti  
R. E. Teschemacher  
M. G. Hatherly  
J. C. M. De Preter

## Summary of Facts and Submissions

- I. An opposition was filed against the European patent No. 440 477.

By the decision of the opposition division dispatched on 16 December 1996 the patent was maintained in an amended version based upon the independent Claim 1 which reads as follows:

- "1. An aerosol dispenser filling apparatus comprising a cylinder (24) having a lower aerosol can valve engaging portion (36), the cylinder being removably mounted to a part (6) of the apparatus above an aerosol can receiving position, a piston (20) mounted in the apparatus and means (16) to actuate the piston for movement within the cylinder to force liquid within the cylinder through a valve (44) of an aerosol can (46) mounted to the valve engaging portion wherein the piston is movable from a first position of the piston outside and above the cylinder where it is clear of the uppermost part of the cylinder to a second position of the piston at the bottom of its stroke within the cylinder characterised in that the cylinder has an upper open flared extremity (26) to guide the piston into the cylinder, wherein the aerosol can valve engaging portion (36) has a cylindrical protrusion (52) within a hole (40) in the engaging portion, the protrusion having a central conduit (56) axially opening in the end surface of the protrusion for communicating from the interior (58) of the cylinder to a valve duct (60) of an aerosol can (46) fitted into the apparatus."

- II. On 13 February 1997 the appellant (opponent) lodged an appeal against this decision. On 14 February 1997 the appeal fee was paid. A statement setting out the Grounds of Appeal was received on 24 April 1997.
- III. With his counterstatement (dated 8 September 1997) to the Grounds of Appeal the respondent (proprietor) filed *inter alia* exhibits GR7 and GR10, namely a declaration by Mr J. Went (WENT/1) dated 11 October 1996 and a declaration by Mr B. Sawyer (SAWYER/1) dated 4 September 1997, and asserted that these documents "discuss the advantages of Mr Ray's machine [i.e. the machine developed by the respondent] over the existing State of the Art ... existing before Mr Ray's invention" (see section 20(iv)).

According to WENT/1, Mr Went heard in 1989 that a new filling machine had been developed by Mr Ray, and this new machine was shown to him and purchased by his company in 1989. According to SAWYER/1, Mr Sawyer was approached in 1989 by Mr Ray who had developed an innovative way of overcoming problems encountered with prior art machines.

In its response (letter dated 19 December 1997) to the above mentioned counterstatement of the respondent, the appellant *inter alia* argued that documents WENT/1 and SAWYER/1 provided evidence that the invention claimed in the patent in suit had been made available to the public before the priority date of the patent.

By his letter dated 20 April 2000, the respondent filed *inter alia* a second declaration by Mr J. Went (WENT/2) dated 12 April 2000 and a second declaration by Mr B. Sawyer (SAWYER/2) dated 12 April 2000.

In WENT/2, it is stated that the machine referred to as "purchased" in the previous declaration WENT/1 was in fact supplied by Mr Ray in May 1990 and purchased on 30 June 1990. In SAWYER/2, it is stated that the machine referred to in the previous declaration SAWYER/1 was disclosed to Mr Sawyer for the first time on 14 June 1990.

In response to a communication of the board, the respondent, with the letter dated 8 May 2000, filed an amended independent Claim 1 upon which he based an auxiliary request.

IV. Oral proceedings were held on 10 May 2000.

V. On the subject of novelty, the appellant essentially argued that the machine referred to in documents WENT/1 and SAWYER/1 deprived the subject-matter of Claim 1 of novelty.

On the subject of inventive step, the appellant referred to the following evidence:

D1a: GB-A-1 260 264;

US'479: US-A-3 386 479;

US'787: US-A-3 187 787;

D13: Declaration by Mr de Wolf dated 6 May 1995, 5 pages;

D14: Declaration by Mr Ray dated 11 May 1995, 7 pages and annexes (Exhibits GR1 to GR6);

- LAKE/1: Declaration by Mr D. J. Lake dated 4 August 1996, 7 pages and Annexes I, Ia, II and IIa;
- SHARP/1: Declaration of Mr S. W. Sharp dated 2 December 1994, 3 pages and Annexes 1 to 3;
- LAKE/2: Affidavit by Mr D. J. Lake dated 25 April 1997, 15 pages and annexes (Exhibits DJL1 to DJL7);
- SHARP/2: Affidavit by Mr S. W. Sharp dated 16 April 1997, 3 pages;
- DR/I: Drawing No. V440/08/0B A of AEROFILL LTD, dated 22 May 1981 (i.e. Exhibit DJL4 referred to in LAKE/2 or Annex I referred to in LAKE/1 or Annex 2 referred to in SHARP I);
- DR/Ia: Drawing No. W040/08/05 of AEROFILL LTD, dated 3 November 1980 (i.e. Exhibit DJL5 referred to in LAKE/2 or Annexe Ia referred to in LAKE/1);
- DR/II: Drawing No. V440/10/00 A of AEROFILL LTD, dated 10 June 1985 (i.e. Exhibit DJL6 referred to in LAKE/2 or Annexe II referred to in LAKE/1);
- DR/IIa: Drawing No. W429/07/40 A of AEROFILL LTD, dated March '85 (i.e. Exhibit DJL7 referred to in LAKE/2 or Annexe IIa referred to in LAKE/1);

In this context the appellant essentially argued that the skilled person, starting from a filling apparatus according to document D1a or from a filling apparatus

referred to in document D13 as the Snijder machine, would arrive in an obvious way at the claimed subject-matter having regard to the documents US'479 or US'787 or to the information derivable from the drawings DR/I, DR/Ia, DR/II, DR/IIa seen in combination with documents LAKE/1, LAKE/2, SHARP/1 or SHARP/2.

VI. The respondent essentially contested the arguments of the appellant.

VII. The appellant requested that the decision under appeal be set aside and that the patent be revoked.

Auxiliarily, the appellant requested that the following questions be referred to the Enlarged Board of Appeal (Article 112(1)a) EPC):

- "1. Does the "qualified" civil standard of proof (on the balance of probabilities" but proof "up to the hilt") referred to in decision T 472/92 as applying in cases of public prior use in which the evidence of such use lies in the power and knowledge of the opponent also apply when the evidence of public prior use lies in the power and knowledge of the patent proprietor who has adduced evidence of such use?
2. If the answer to Question 1 is "no", does a lesser standard of proof than the normal civil standard apply?
3. If the answer to Question 2 is "yes", what is that lesser standard?"

The appellant also requested that documents WENT/2 and

SAWYER/2 submitted by the respondent with its letter dated 20 April 2000 as well as the amendments to Claim 1 filed with the respondent's letter dated 8 May 2000 be not admitted because of their late filing (Article 114(2) EPC).

VIII. The respondent requested that the appeal be dismissed.

Auxiliarily the respondent requested that the decision under appeal be set aside and the patent be maintained on the basis of the independent Claim 1 filed with the letter dated 8 May 2000.

### **Reasons for the Decision**

1. The appeal is admissible.

In the written phase of the appeal proceedings, the respondent had challenged the admissibility of the appeal, whereupon with a communication dated 5 May 2000 the board had expressed its provisional opinion that the appeal was admissible.

During the oral proceedings, the respondent withdrew his request concerning the admissibility of the appeal, so that no further argumentation is needed.

2. *The filling machines referred to in documents WENT/1, SAWYER/1, WENT/2 and SAWYER/2 and the request to refer questions to the Enlarged Board of Appeal*

2.1 The admissibility of documents WENT/2 and SAWYER/2

Documents WENT/2 and SAWYER/2 relate to previous



documents WENT/1 and SAWYER/1, which were filed by the respondent with the intention of supporting the validity of the patent with respect to inventive step. The issue of whether the claimed subject-matter lacks novelty with regard to documents WENT/1 and SAWYER/1 was raised by the appellant. Documents WENT/2 and SAWYER/2, whose filing represents a reaction of the respondent to this appellant's objection, in order to try to clarify the impact of the previous documents WENT/1 and SAWYER/1, are clearly relevant for the issue of novelty.

The fact that the respondent reacted to the novelty objection of the appellant only on 20 April 2000, i.e. about 20 days before the oral proceedings and more than two years after this objection was made, does not necessarily imply an abuse of proceedings. According to the Board, the appellant did not support with adequate arguments its assertion relating to such an abuse of proceedings. Also the Board itself has prima facie no reason to detect such an abuse. Even if the appellant had been surprised by the filing of documents WENT/2 and SAWYER/2, the appellant would still have had the possibility to request the taking of evidence by hearing these two persons. This has not been done. Furthermore, it has also to be noted that the request to disregard these documents was submitted for the first time during the oral proceedings.

Therefore, documents WENT/2 and SAWYER/2, due to their relevance with respect to the issue of novelty, are admitted into the proceedings.

2.2 Documents WENT/1, SAWYER/1, WENT/2 and SAWYER/2

2.2.1 In WENT/1, Mr Went declares that his company in 1989 purchased a machine developed by Mr Ray and that a machine of this type was previously shown to him. He further indicated some advantages of the machine (page 2, first paragraph). However, no specific technical features of this machine can be derived from this declaration so that this declaration does not establish an enabling disclosure by prior use which could be used in assessing novelty or inventive step of the subject-matter of Claim 1.

In SAWYER/1, Mr Sawyer firstly describes a filling machine according to the state of the art referred to as "Sprayon pump" (see 6th and 7th paragraphs), then states that in 1989 he was contacted by Mr Ray who had developed a new machine (see 8th paragraph) and subsequently describes a machine referred to as "Mr Ray's pump". However, this document - although it indicates some technical features of "Mr Ray's pump" - does not make it clear that the information concerning this machine was made available to Mr Sawyer before the priority date of the patent in suit. Moreover, document SAWYER/1 does not indicate any specific details as to when, where and how the machine developed by Mr Ray would have been made available to Mr Sawyer.

A link between these machines and the subject-matter claimed in the patent in suit can only be made on the basis of a sentence in the respondent's letter dated 8 September 1997 (section 20.IV), according to which documents WENT/1 and SAWYER/1 discuss "the advantages of Mr Ray's machine over the existing State of the Art ...". However, neither the documents WENT/1 or SAWYER/1 nor the above mentioned sentence permits a clear identification of **what** could have been purchased

by the company of Mr Went or shown to him.

It has to be noted that these documents WENT/1 and SAWYER/1 were filed by the respondent in order to indicate the advantages of Mr Ray's machine over the closest prior art and thus to support the inventiveness of the subject-matter claimed in the patent in suit. If these documents however were to be considered for evaluating the patentability of the subject-matter of Claim 1, then their probative value would be very low because it cannot be checked whether the machine referred therein as Mr Ray's machine or pump was effectively provided with the technical features specified in Claim 1.

The fact that Mr Ray - according to his declaration D14 - ordered on 14 November 1989 10 aerosol cans provided with Lindal valves does not imply that a filling machine according to the patent in suit was made available to the public before 31 January 1990. This could mean that in the time between November 1989 and January 1990 the machine according to the patent was in a development phase.

- 2.2.2 Document SAWYER/2 makes it clear that the machine developed by Mr Ray was disclosed to Mr Sawyer after the priority date of the patent in suit (see 4th paragraph). The sentence according to which "in 1989 no technical details were disclosed" (see 3rd paragraph) is not in contradiction with document SAWYER/1 because this document - although it refers to some technical details of the machine - does not unambiguously indicate that these details were disclosed in 1989.

The Board therefore primarily has no reason to doubt

the content of document SAWYER/2, and is secondly of the opinion that this document cannot change the evaluation by the Board of document SAWYER/1, which does not establish an enabling disclosure.

The sentence in document WENT/2 according to which the discussions between Mr Ray and Mr Went were "of non technical nature" also is not in contradiction with document WENT/1 which does not refer in any way to technical features of the machine. The fact that document WENT/1 refers to advantages of the machine developed by Mr Ray (see page 2, first paragraph: "... it was cleaner, safer, faster and more reliable") does not imply that the technical features responsible for these advantages were already disclosed to Mr Went in 1989.

In WENT/2 Mr Went affirms that his previous statement in document WENT/1, i.e. the statement that the machine developed by Mr Ray was purchased by the company of Mr Went in 1989, is misleading and declares that a machine was purchased only in June 1990. Due to this second statement and without any additional supporting proof it certainly cannot be said that the previous statement is the more credible one. The fact that no further evidence supporting this second statement was submitted is not relevant in so far as there is no evidence supporting the first statement. The Board therefore has prima facie no reason to doubt this last filed second statement, in other words, none of these statements has a significant probative value when assessing the patentability of claims.

It should also be noted, that having regard to the observations in the above section 2.2.1, the

appellant's arguments concerning confidentiality are not relevant, particularly since there is no sufficient proof that an apparatus according to Claim 1 was made available to the public before the priority date of the present opposed patent.

- 2.2.3 The parts of decision T 472/92 referred to by the appellant concern an alleged public prior use caused by the delivery of materials produced by the opponent to a Japanese company which was a business corporation set up by a joint venture between the opponent and another Japanese company. In this respect, the issue to be decided was the alleged confidentiality of the delivery of the above mentioned materials. In this issue, the board decided that the evidence submitted by the opponent - in the light of the absence of any evidence relating to the nature and the content of the Joint Venture Agreement that set up the first Japanese company - was insufficient to meet the required standard of proof that the above mentioned delivery was made as a result of a normal commercial sale. As to the standard of proof which should apply in cases involving the issue of public prior use, the board - considering that "in the majority of prior public use cases all the evidence in support of an alleged prior public use lies within the power and knowledge of the opponent" - asserted that an opponent must prove his case up to the hilt. In this respect, it has to be noted that - although this assertion of the board was presented in the decision as having a general value - the specific issue in case T 472/92, as referred to by the appellant in the present case, relates to the relationship between two companies linked by a joint venture agreement. This circumstance put the proprietor of the patent in such a situation that he had practically no

access to the evidence relating to the specific issue. In other words, it is clear that information on the public prior use case depicted in T 472/92 completely lay in the power and knowledge of the opponent and of the Japanese firm which, due to the joint venture cooperation, was closely linked to the opponent. The proprietor therefore had practically no access to evidence, so that it was not possible to bring forward a reasonable defence in that respect.

In the present case, the objections raised by the appellant/opponent alleging the prior disclosure of the machine according to the patent in suit are based upon documents (WENT/1 and SAWYER/1) submitted by the respondent/proprietor. These documents relate to an alleged public prior use based upon the relationships of Mr Ray to the companies of Mr Went and of Mr Sawyer, without there being any particular agreement therebetween, so that it cannot be assumed that the evidence concerning this alleged public prior use lies solely in the power and knowledge of the proprietor/respondent. In other words, it can be assumed that the appellant in the present case could have had access to further evidence concerning this alleged public prior use, for instance by requesting that Mr Went and/or Mr Sawyer be heard as a witness before the Board or before a competent court in their country of residence (Article 117(1) and (4) EPC). The issue referred to in T 472/92 is basically different from the present one and is therefore not relevant for the present case.

- 2.2.4 Having regard to the above comments the board is not satisfied that the evidence referred to above proves that a machine according to the patent in suit was made

available to the public before the priority date of the patent in suit.

- 2.3 The first question the appellant requested be referred to the Enlarged Board of Appeal concerns cases of alleged public prior use in which "the evidence of public prior use lies in the power and knowledge of the patent proprietor who has adduced evidence of such use".

As already explained in section 2.2.3 above, in the present case - although the evidence has been adduced by the patent proprietor - the evidence of the alleged public prior use does not lay solely in his power and knowledge, but could also be proven by either Mr Went or Mr Sawyer, so that it would have been possible for the appellant to request to hear these persons as witnesses in accordance with Article 117(1)(d) and (4) EPC. Therefore, the answer to this question, which does not reflect the situation in the present case, is not relevant for the decision to be taken in the present case.

Since the second and the third questions are linked to the answer to the preceding question, they are also not relevant for the present case.

Therefore, the request for referral to the Enlarged Board of Appeal is rejected.

3. *Observations concerning the claimed subject-matter*

- 3.1 Claim 1 defines an aerosol dispenser filling apparatus essentially by means of structural and functional features of the filling apparatus itself. It also

refers to the aerosol dispenser (i.e. to the aerosol can) to be filled by the claimed apparatus essentially in the following terms (emphasis added):

- the cylinder has an "**aerosol can valve** engaging portion", i.e. a portion suitable for engaging the aerosol can valve;
- the piston and cylinder unit is suitable "to force liquid within the cylinder **through a valve (44) of an aerosol can (46) mounted to** the valve engaging portion";
- the cylindrical protrusion (52) of the aerosol can valve engaging portion has a central conduit which is suitable "**for communicating** from the interior (58) of the cylinder **to a valve duct (60) of an aerosol can (46) fitted into the apparatus**".

3.2 Moreover, it is clear from the wording of Claim 1 that the cylindrical protrusion (52) is provided "within a hole (40) in the engaging portion".

3.3 Claim 1 does not explicitly refer to the structure of the valve of the aerosol can. However, the description and the drawings of the patent refer to a valve 44 comprising a valve housing provided with a threaded extension 43 and a spring loaded valve member 48 arranged inside the valve housing. Thus, it has to be understood that the valve member 48 - when the can is used - can be opened by an actuator entering the valve housing.

3.4 Claim 1 also does not explicitly define the structure of the coupling between the filling apparatus and the



aerosol can fitted into the apparatus. However, it is clear from the wording of the claim that there is a **hole** in the engaging portion and a **protrusion** within the hole, which is provided with a central conduit.

According to the description and the drawings of the patent, the hole 40 (which according to Claim 1 is provided in the valve engaging portion) is suitable for engaging the aerosol can valve and the protrusion 52 with its central conduit 56 (which according to Claim 1 is suitable for establishing communication between the cylinder and the can valve duct 60) is located during filling inside the valve extension 43. In other words, the structure of the coupling between the apparatus and the aerosol can is of double nature, the apparatus having a hole receiving an extension of the can valve and a protrusion which can be received in the valve housing of the aerosol can (since it has to establish the communication between the cylinder and the can valve duct).

3.5 Claim 1 indicates that the piston and cylinder unit forces liquid through the valve without explicitly indicating that the valve member 48 of the aerosol can is **not** mechanically depressed by the protrusion 52. According to the drawings of the patent (Figure 3) the protrusion 52 cannot make contact with the valve member. Thus, it can be assumed on the basis of this information that the valve member of the can opens due to the pressure difference between the interior of the cylinder of the filling apparatus and the interior of the can.

3.6 Claim 1 refers to a cylinder removably mounted to a part of the apparatus and to a piston moving from a

first position outside of the cylinder to a second position at the bottom of its stroke within the cylinder.

According to the description of the patent, the cylinder 24 is suitable for being filled with the desired quantity of liquid (column 3, lines 33 to 47). In other words, the cylinder 24 operates not only as a receiving portion for the piston but also as container for the liquid. According to Figures 1 and 2, when the piston 20 is in its upper position the cylinder can easily be removed from the apparatus, since no further container elements are present.

3.7 Furthermore, it is clear from the claim that the cylinder **ends** in an upper open flared extremity, which is part of the cylinder and therefore is below said upper position of the piston.

4. *Novelty (main request)*

The subject-matter of Claim 1 is novel. Novelty was not disputed, except for the alleged public prior use referred to in section 2 above, which was considered by the Board as being not sufficiently proven.

5. *The evidence referred to by the appellant with regard to inventive step*

5.1 Document D1a discloses an aerosol dispenser filling apparatus provided with a reservoir and cylinder assembly 35 comprising a reservoir portion 36 and a lower operating portion 85 provided with a working bore 37, the lower operating portion 85 being suitable for engaging an aerosol can valve, the lower operating

portion 85 (with the working bore 37) being removably mounted to a part 34 of the apparatus above an aerosol can receiving position, a piston 48 being mounted in the apparatus and means 46 being provided to actuate the piston for movement within the working bore to force liquid within the working bore 37 through a valve of an aerosol can mounted to the lower operating portion 85, the piston being movable from a first position of the piston still inside the assembly 35 but outside and above the working bore 37 where it is clear of the uppermost portion of the working bore to a second position of the piston at the bottom of its stroke within the working bore 37.

It has to be noted that the piston 48 in its first position is **not** outside and above the **reservoir and cylinder assembly** 35 (see page 3, lines 3 to 14; Figures 1 and 4).

5.2 The appellant also referred to a filling apparatus referred to in document D13 as the Snijder machine and asserted that this machine is provided not only with the features specified in the pre-characterising portion of Claim 1 as granted but also with the feature that "the piston is movable from a first position of the piston outside and above the cylinder where it is clear of the uppermost part of the cylinder to a second position of the piston at the bottom of its stroke within the cylinder".

The respondent did not contest this assertion of the appellant.

5.3 Drawings DR/I and DR/Ia relate to a filling head in which the aerosol can engaging portion has a **tipped**

protrusion.

The drawing DR/II relates to a filling head in which the aerosol can engaging portion has a protrusion within a hole in the engaging portion, the protrusion having a central conduit axially opening in the end surface of the protrusion. The drawing DR/IIa shows in detail the element forming the protrusion in the filling head according to the drawing DR/II.

It is clear - and in this respect both parties agree - that the filling heads shown in all these drawings were developed for introducing liquid propellant, which under atmospheric pressure is in a gaseous state, into an aerosol can. In other words, a filling head of this type forms a closed, tight system with the aerosol can to be filled and with the reservoir containing the propellant, in which the pressure is so high that the propellant is in the liquid state.

5.3.1 The issue of whether the filling heads according to these drawings were made available to the public before the priority date of the patent in suit was discussed during the oral proceedings with regard to documents LAKE/1, LAKE/2, SHARP/1 and SHARP/2. However, this issue is not decisive for the decision findings in the present case, because - as explained below - the information derivable from these drawings in combination with the other documents would not render obvious the claimed subject-matter.

5.4 In document LAKE/2, Mr Lake referring to drawings DR/I and DR/Ia asserted that during his employment with Aerosol Packaging Company from 1961 to 1967, "it was everyday practice in that company to 'top-up' filled

but underweight aerosols with product, **including paint**, ... using filler heads having probes substantially as shown in Exhibits DJL4 and DJL5 [i.e. in DR/I and DR/Ia] ... " (see section 25 on page 15; emphasis added).

This assertion of Mr Lake does not relate to drawings DR/I and DR/Ia since these drawings were drawn in 1981 and 1980, respectively. Therefore, this assertion concerns a different alleged public prior use.

In this respect, it has to be noted that in his previous declaration (LAKE/1) Mr Lake did not refer to this alleged public prior use but only affirmed that he knew from his experience that the probes according to drawings DR/I and DR/Ia "are suitable for filling paint in a pre-gassed can, provided the probe is of appropriate dimensions".

It has also to be considered that this assertion of Mr Lake, which relates to an alleged public prior use, different from the filling head according to documents DR/I, DR/Ia, DR/II and DR/IIa (see above section 5.3), is not supported by further evidence.

In any case, the mere assertion that "probes" of the type shown in drawings DR/I and DR/Ia were used to fill paint in aerosol cans in a firm (Aerosol Packaging Company) does not imply that this use was public.

Therefore, the board finds that this alleged public prior use is not sufficiently proven.

5.5 In document SHARP/2, Mr Sharp referring to drawing DR/I makes the following assertions:-

- "sometimes however we also introduced at Solvitrol a liquid product, for example a lubricant or a paint, introduced into a can already containing propellant ('pre-gassed')" (page 2, section 4(ii)) and
- "when using the filler head for introducing product, including paint, into a pre-gassed aerosol can, no problem of blockage of the radial outlets of the pin arose" (page 3, section 4(v)).

It is clear from the context of document SHARP/2 that these assertions relate to an alleged public prior use within the company of Mr Sharp (Solvitol Limited).

Also with regard to this alleged public prior use, it has to be noted that

- in his previous declaration (SHARP/1) Mr Sharp did not refer to the use of a filler head of the type shown in drawing DR/I for filling paint into the can,
- there is no further evidence supporting this allegation, and
- even if this use took place there is no evidence proving that it was public.

Therefore, the board finds that also this alleged public prior use is not sufficiently proven.

5.6 Document US-'479 discloses a filling head provided with a supporting ring 61 (which can be supported on the top of an aerosol can 10) and a can valve engaging portion (head member 62) having a cylindrical protrusion

(injector member 50) within a hole in the engaging portion 62 (the hole being suitable for receiving an extension 15 of the valve of an aerosol can), the protrusion having a central conduit (channel 51) opening in the end tipped surface of the protrusion for communicating from a suitable source of pressurized product to a valve duct of an aerosol can fitted into the apparatus.

It can be assumed that this filling head is suitable for introducing liquid propellant into the aerosol can.

- 5.7 Document US-'787 discloses an aerosol dispenser filling apparatus comprising a tinting gun 10 provided with a cylinder portion 11 and a piston 12 mounted in the apparatus, the cylinder portion 11 having an upper cylinder portion 19 and a lower axial bore portion 22, means being provided to actuate the piston for movement within the upper cylinder portion 19 to force liquid within the upper cylinder portion 19 through a valve of an aerosol can positioned under the axial bore portion 22. The tinting gun is also provided with a tipped protrusion 39 having a central conduit 44, wherein the tip of the protrusion, when the gun is used to introduce liquid into a pre-gassed can, unseats the valve of the can, without there being a leakage of propellant since the protrusion 30 makes a seal with a gasket 37 provided in the mounting cover 31 of the can.

6. *Inventive step (main request)*

- 6.1 The parties consider that document D1a discloses the closest prior art.

The subject-matter of Claim 1 differs from this prior

art filling apparatus in that

- (a) the piston is movable from a first position of the piston outside and above the cylinder where it is clear of the uppermost part of the cylinder,
- (b) the cylinder has an upper open flared extremity to guide the piston into the cylinder, and
- (c) the aerosol can valve engaging portion has a cylindrical protrusion within a hole in the engaging portion, the protrusion having a central conduit axially opening in the end surface of the protrusion for communicating from the interior of the cylinder to a valve duct of an aerosol can fitted into the apparatus.

6.1.1 With regard to feature (a), the appellant argued that this feature does not distinguish the subject-matter of Claim 1 from the prior art according to document D1a. Moreover, the appellant, referring to the prior art concerning the so called Snijder machine, argued that this machine is certainly provided with this feature.

With respect to feature (b), the appellant argued that this feature either is known from document D1a or has no inventive merit.

6.2 In the decision under appeal it was assumed that the subject-matter of Claim 1 is distinguished from the prior art disclosed in document D1a only by features (b) and (c) and it was found that the claimed subject-matter involved an inventive step only because of feature (c).



Therefore, the board will firstly examine whether the subject-matter of Claim 1 involves an inventive step with regard to feature (c).

6.3 According to the description of the patent (column 1, lines 38 to 40), the aerosol can filler according to the prior art (D1a) gives rise to problems due to the pressure on the can valve during filling which can result in a constriction of the valve entry. As explained by the respondent during the oral proceedings, the valve engaging portion 85 of the filling apparatus according to document D1a surrounds the valve housing 16 so that the pressure during filling can produce a deformation of the upper portion 25 and constrict the valve entry, so that leakage around the valve housing can occur. Such a leakage would result - when paint is introduced into the can - in producing an aerosol can having traces, i.e. spots, of paint around the valve.

Feature (c) defines a cylindrical protrusion suitable for entering the valve housing since it has to make sure that there is a communication between the interior of the cylinder and the valve **duct**. Therefore, it is credible that, because the valve housing is supported internally by the protrusion during filling, the pressure does not produce any constriction of the valve entry and leakage can easily be prevented.

Thus, as far as feature (c) is concerned, the problem to be solved is to avoid the disadvantages of the known filling device, i.e. to prevent formation of spots of paint in the region of the aerosol can valve due to the leakage around the valve when paint is introduced into the aerosol can.

6.3.1 The appellant alleged that the deformation of the upper portion of the valve housing of the aerosol can described in document D1a depends on the rigidity of the plastic material of the valve housing and argued that the definition of a problem relating to this deformation is based only upon an assertion of the respondent and that it should be established by means of evidence that this deformation happens.

The board cannot accept this argument because, having regard to the content of document D1a, it is credible that this problem may occur.

It has also to be noted that the problem can be derived from the description of the patent not only because document D1a is cited therein but also because the description explicitly refers to "problems due to pressure during filling on the can valve which constrict the valve entry" (see column 1, lines 38 to 40). Therefore, in the present case, where it is furthermore clear that the indicated problem is a credible one, it is up to the appellant to prove that this problem cannot occur. This has not been done or even attempted.

6.4 Thus, it has to be investigated whether the prior art indicates a solution for the above mentioned problem.

6.4.1 According to the appellant documents US-'479 and DR/I (DR/Ia) show part of the features referred to in feature (c) and document DR/II (DR/IIa) clearly indicates all these features.

However, the decisive issue is not whether these documents indicate the features upon which the claimed

solution is based but whether the skilled person realizes that these features solve the technical problem confronting him. In other words, the question is not whether the skilled person **could** have combined the feature known from these documents with the closest prior art but whether he **would** have done so in the expectation of solving his technical problem.

Thus, it has to be investigated whether there is a link between these documents and the problem to be solved.

Document US-'479 (see the above section 5.6) as well as documents DR/I (DR/Ia) and DR/II (DR/IIa) (see the above section 5.3) all concern filling heads developed for introducing liquid propellant into the aerosol can. Since propellants are gaseous under atmospheric pressure, these filling heads must form a pressurized closed tight system with the aerosol can. This implies that any leakage of propellant has to be prevented in order to keep in the closed system a pressure sufficient to maintain the propellant in the liquid state.

Thus, these documents, even if they can be considered as implicitly dealing with the general problem of preventing leakage of propellant during filling, do not relate to the specific problem to be solved by the claimed subject-matter in so far as this problem only arises when filling aerosol cans with paint. In this respect, it has to be noted that even if leakage of propellant were to occur during filling in the region around the aerosol can valve, this could not result in an aerosol can having traces of the product around the valve since the propellant escaping from the leak would immediately become gaseous. In other words, these

document do not give any specific indication to a problem which relates to leakage of liquid in the region around the aerosol can valve.

Having regard to these comments, the skilled person would not consider documents US-'479, DR/I (DR/Ia) and DR/II (DR/IIa) when searching for a solution to his problem.

6.4.2 Document US-'787 is less relevant than the documents referred to in the above section 6.4.1 because it concerns a filling device having a protrusion making contact with the valve of the can. Moreover, this document does not indicate the problem of preventing the leakage of a product but the problem of preventing leakage of propellant from the aerosol can when the can is filled with paint. Thus, the skilled person would not consider this document when searching for a solution to his specific problem.

6.4.3 Therefore, the skilled person starting from a filling machine according to document D1a would not arrive at a machine provided with feature (c) referred to in the above section 6.1.

These findings, based on the differing feature (c), also apply if the skilled person were to start from a machine of the type referred to as the Snijder machine, which, according to the appellant, was not provided with feature (c) of the filling apparatus according to the present invention (see above section 5.2).

6.5 Having regard to the above comments, the appellant's arguments referring to features (a) and (b) as well as the argument according to which a cylindrical

protrusion having a central conduit axially in the end surface of the protrusion has no additional effects with respect to a tipped protrusion are not relevant.

- 6.6 The subject-matter of Claim 1, therefore, cannot be derived in an obvious way from the prior art referred to by the appellant.
7. The patent can therefore be maintained on the basis of the main request of the respondent. Therefore, there is no need to consider the auxiliary request of the respondent and the appellant's request referring to this auxiliary request(see the above section VII).

## **Order**

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

1. The appeal is dismissed.
2. The request for referral to the Enlarged Board of Appeal is refused.

The Registrar:

The Chairman:

G. Magouliotis

C. Andries