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D E C I S I O N
of 9 February 1995

Case Number: T 0585/92 - 3.3.2
Application Number: 79300039.9
Publication Number: 0003172
IPC: A61K 7/32

Language of the proceedings: EN

Title of invention:

The use of a deodorant detergent composition and a method for
suppressing human body malodour

Patentee:

UNILEVER PLC, et al

Opponent:

- (01) Bayer AG
(02) PROCTER & GAMBLE E.T.C.
(03) Henkel Kommanditgesellschaft auf Aktien

Headword:

Deodorant detergent/UNILEVER

Relevant legal provisions:

EPC Art. 54, 55, 56, 83, 84, 87, 123

Keyword:

"Sufficiency - yes - in light of Appellant's further
experiments"
"Clarity and support - yes"
"Priority - in order"
"Novelty - yes"
"Inventive step - yes"
"Evident abuse in relation to Applicant - early publication by
Brazilian Patent Office not considered to be so"

Decisions cited:

G 0005/83, T 0014/83, T 0173/83, T 0098/84, T 0226/85,
T 0292/85, G 0002/88, G 0009/91, G 0010/91, T 0409/91,
T 0435/91, T 112/92

Headnote:

Headnote follows



Case Number: T 0585/92 - 3.3.2

DECISION
of the Technical Board of Appeal 3.3.2
of 9 February 1995

Appellant:
(Proprietor of the patent)

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Representative:

Decision under appeal:

Decision of the Opposition Division of the
European Patent Office dated 15 January 1991,
posted on 27 March 1992 revoking European patent
No. 0 003 172 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: P. A. M. Lançon
Members: I. A. Holliday
J. A. Stephens-Ofner

Summary of Facts and Submissions

- I. European patent No. 0 003 172 relating to the use of a deodorant detergent composition and a method for suppressing human body malodour was granted on the basis of fifteen claims contained in European patent application No. 79 300 039.9, filed on 10 January 1979 and claiming priority from British application 1286/78 filed on 12 January 1978.
- II. Three oppositions were filed against the granted patent. Of the numerous documents cited during the opposition, the following remain relevant to the present decision:
- BR-A-81-7604601 (1)
GB-A-838 240 (3)
DE-A-2 433 703 (6)
DE-A-2 805 767 (15)
- III. The Opposition Division revoked the patent whilst the claimed subject-matter was held to be both novel and inventive vis-à-vis the closest prior art as represented by documents (1) and (6); the Opposition Division considered the objection under Article 100(b) EPC to be well founded. Although having no reason to doubt that the worked examples in the patent in suit were reproducible, the Opposition Division held that the functional manner in which the invention had been defined gave the skilled person virtually no lead as to which materials might be of use in the invention. In other words, it was not possible for the skilled person to realise substantially any embodiment of the invention without undue burden. Decisions T 226/85 (OJ EPO 1988, 336) and T 292/85 (OJ EPO 1989, 275) in particular were referred to.

- IV. The Appellant lodged an appeal against the said decision. Oral proceedings took place on 9 February 1995.
- V. With the grounds of appeal, the Appellant submitted a new main request, together with five auxiliary requests. The Appellant sought to file a sixth auxiliary request at the oral proceedings. The arguments of the Appellant both during the written procedure and at the oral proceedings may be summarised as follows:

In revoking the patent on the grounds of insufficiency (Art. 83 EPC), the Appellant considered that the Opposition Division had relied too heavily on decision T 226/85. It was argued that decision T 292/85 was more relevant to the patent in suit. The morpholine test was used to select individual perfumery materials. The odour reduction value test determined the efficacy of combinations of materials selected by the morpholine test. Moreover, the description of the patent in suit contained six examples of deodorant perfume compositions and thus satisfied the requirement of T 292/85 that a description need contain only details of one workable embodiment. With the grounds of appeal, the Appellant filed experimental evidence relating to a series of tests in which the components of the disclosed deodorant compositions were varied within the rules set out in Claim 1 of the patent in suit. If materials were chosen which satisfied the morpholine test (or Raoult Variance Ratio test) as substitutes for others which also satisfied the test, it was possible to obtain deodorant perfume compositions which satisfied the other two tests set out in Claim 1 of the patent in suit.

If the Board were unable to accept the arguments of the Appellant, it was requested that the alleged conflict between decisions T 226/85 and T 292/85 be resolved by a question to the Enlarged Board.

The Appellant defended the claim to priority based on British application No. 1286/78 against the attacks of the Respondents.

The Appellant agreed in general with the findings of the Opposition Division in respect of novelty and inventive step. However, the Appellant pointed out that the question as to whether the early publication of document (1) by the Brazilian Patent Office constituted an abuse in terms of Article 55(1)(a) EPC had not been decided at any point in the proceedings.

Document (1) was filed in Brazil on 14 July 1976 and originally claimed priority from several GB applications, the earliest having a filing date of 15 July 1975. Under Brazilian patent law, it would have been due for publication on 16 August 1977. However, on 31 December 1976, the Applicant abandoned all the claimed priorities which should have delayed the publication for a further 12 months. Notwithstanding this abandonment of priority, the application was erroneously published on 16 August 1977, i.e. before the priority date of the patent in suit.

- VI. Each Respondent supported the decision of the Opposition Division on the question of insufficiency. Further arguments were advanced in which decisions T 409/91 (OJ EPO 1994, 653) and T 435/91 (headnote published in OJ EPO 10/94), which had not been available to the Opposition Division, were quoted. It was argued that an invention had to be considered in relation to its technical contribution to the art. If it was not clear

how the invention could be operated over its whole ambit, the description must be regarded as insufficient. From the thousands of perfume ingredients known to those skilled in the art, only six compositions comprising widely different ingredients had been specifically disclosed. The Respondents supported the view that the three tests of Claim 1 imposed an undue burden on the skilled person, especially since it appeared that materials which did not even satisfy the first test (morpholine) could nevertheless be present in a deodorant perfume composition which satisfied the other two tests. One Respondent claimed that the Appellant had admitted before the Opposition Division that the skilled person would only have a 1 in 100 rate of success in experiments to find a deodorant perfume. The Appellant, however, had no recollection of having made such an admission.

Two of the Respondents questioned the entitlement to priority based on GB 1286/78. One argument was that the first disclosure of the present invention had been in a prior British application 48109/77. One Respondent argued that GB 1286/78 did not disclose the combination of three tests demanded by Claim 1 of the patent in suit. If the claim to priority could not be substantiated, other prior art, e.g. document (15), could be taken into consideration when judging novelty and inventive step.

The Respondents contested the Appellant's arguments concerning the early publication of the Brazilian document (1). Although this related to a mistake on the part of the Brazilian Patent Office, the Respondents did not consider such a mistake to be an "evident abuse" within the meaning of Article 55(1)(a) EPC.

One Respondent considered that the subject-matter of the patent in suit lacked novelty over document (1), pointing to Example 24 thereof, which related to the use of a deodorant perfume composition identical to Composition 5 of the patent in suit. The said perfume composition, according to page 66 of (1), was applied in a test soap bar to human skin. This was in effect the same test as "The Deodorant Value Test" described on page 3, lines 16 to 56 of the patent in suit. The Respondent considered that the disclosure of (1) implicitly referred to the washing of textiles.

In respect of inventive step, the Respondents considered document (1) to be the closest state of the art. Respondents argued that the claims of (1) were not limited to materials for personal washing and that the description was expressed in general terms. The passage on page 40, which referred to builders and fluorescers, was regarded as an indication of use in textile washing. It was further argued that terms such as soaps and shampoos had a meaning beyond mere personal hygiene. Although there was no hint in (1) of the third test of the patent in suit, which involved washing shirts, this was merely what one skilled in the art would do in testing a product for textile washing. Even if the use claimed in the patent in suit were to be regarded as novel over (1), such a second non-medical indication must be regarded as lacking inventive step if there is a clear link between such an indication and the earlier known use. Decisions T 98/84 (EPOR, 1986, 30) and T 112/92 (OJ EPO 1994, 192) were referred to.

Further arguments were based on document (3) published in 1960 from which it was apparent that perfumes had long been used in fabric washing detergent compositions. Several examples of suitable perfumes were disclosed in (3). Residual perfume odour, which survived washing,

rinsing and ironing cycles was mentioned together with a test to measure it. Respondents also referred to two articles by Sturm and Mansfield published respectively in Chemiker Zeitung, 99 (1975), pages 69 to 78 and at the 7th Detergent Congress in Barcelona, March 3 to 5, 1976 (hereinafter SM1 and SM2). SM1 referred to the adhesion of perfumes to textiles and mentioned several perfume components present in the compositions of the patent in suit. Further perfume components were disclosed in SM2, which set out the desiderata for a perfume which showed substantivity to textile fibres and which retained a distinguishable odour for several days after a washing and rinsing cycle. Respondents argued that this earlier prior art together with the disclosure of (1) must lead the skilled person to the invention of the patent in suit, the tests therein being considered to be a mere "dressing up" of the claimed use.

VII. Claim 1 of the main request, received on 3 August 1992 reads as follows:

"1. The use of a deodorant detergent product for washing fabric to impart to said fabric the ability to suppress human body malodour when the fabric is worn as a garment, the detergent product comprising:

- (i) from 5 to 95% by weight if the product is solid, from 5 to 80% by weight if the product is a liquid, of non-soap detergent active compound chosen from anionic, nonionic, cationic, amphoteric and zwitterionic detergent active compounds;
- (ii) from 0.05 to 3% by weight of a deodorant composition comprising a combination of perfume materials that depress the partial vapour pressure of morpholine by at least 10% more than

that required by Raoult's Law, the deodorant composition having a Deodorant Value, (as measured by the Whitehouse and Carter test modified by the use of a 0 to 5 grading scale, and assessment after 5 hours instead of 24 hours), when incorporated into a personal washing bar at a concentration of 1.5% by weight, of from 0.50 to 3.5; and

- (iii) other detergent adjuncts which include a builder and form the balance of the product;

the detergent product having an Odour Reduction Value of at least 0.50, the Odour Reduction Value being defined by the Odour Reduction Value Test, which in turn is based on the Whitehouse and Carter Test with the following modification, namely that assessment of body malodour is performed 5 hours after treatment instead of 24 hours, using a 0 to 5 instead of a 0 to 10 odour grading scale, the Test being carried out following application to shirt fabric during the wash cycle of a laundry process, the body malodour remaining on the shirt fabric being assessed, rather than the malodour of the axilla itself, the fabric washing and odour assessment being conducted as follows:

- (a) polyester coat style button through shirts are prewashed in an automatic washing machine using a nonionic detergent fabric washing powder to ensure that the shirts to be used in the Odour Reduction Value Test are all equally clean and free from dressing prior to washing in the detergent product;
- (b) the prewashed shirts are line dried and washed again in the automatic washing machine in which the wash liquor contains 0.4% by weight of the fabric washing powder or liquid product under test

containing 0.2% by weight of the deodorant composition, the ratio of shirt fabric (dry weight basis) to wash liquor being 40 g fabric per litre wash liquor;

- (c) the shirts are agitated in the wash liquor for 10 minutes at a temperature of 50°C, then rinsed and spun to a moisture content of about 50% by weight water and finally line dried to a moisture content of not greater than 10% to provide test shirts;
- (d) a further batch of the prewashed shirts to serve as control shirts are washed again and then dried under similar conditions, except that the deodorant composition is omitted from the fabric washing powder or liquid product added to the wash liquor;
- (e) the shirts are folded and stored overnight in polyethylene bags until required for testing by a panel of male subjects, half the subjects then wearing test shirts treated with the deodorant composition containing fabric washing powder or liquid product and half wearing control shirts without deodorant composition treatment; and
- (f) after 5 hours, the odour of the shirt fabric in the region of the axilla is scored in each case by female assessors, the Odour Reduction Value of the fabric washing powder or liquid product being finally calculated as the difference between the average score for the shirts washed with the test product and the average score for the shirts washed with the control product."

The auxiliary requests relate to uses expressed in more restrictive terms.

VIII. The Appellant requested that the contested decision be set aside and the patent maintained on the basis of the main requests filed on 3 August 1992 or on the basis of either one of auxiliary requests 1, 2 or 6 or 3 or 4 or 5 of which all but the third auxiliary request (labelled "Auxiliary Request 6") were filed on 3 August 1992.

The Respondents requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.
2. *Amendments (main request)*
 - 2.1 The restricted ranges of non-soap detergent of 5 to 95% for a solid product and 5 to 80% for a liquid product are the preferred ranges on page 5, lines 1 to 3 of the printed patent specification (p. 11, lines 4 to 8 as originally filed).
 - 2.2 The new range of deodorant composition of 0.05 to 3% is to be found on page 5, line 57 of the printed document as preferred range (p. 14, lines 21 to 22 as originally filed).
 - 2.3 The reference to "other detergent adjuncts which include a builder" is based on page 5, line 64 to page 6, line 1 of the printed description (p. 15, lines 4 to 7 as originally filed). A builder features also in Claim 8 as granted.

2.4 The remainder of the claim corresponds to Claim 1 as granted and is supported by the original disclosure. The claim is of narrower scope than the granted claim. The requirements of Articles 123(2) and 123(3) are accordingly satisfied.

2.5 Claims 2 to 13 of the main request correspond to Claims 2 to 5, 7 and 9 to 18 as granted.

3. *Sufficiency (Article 83 EPC)*

3.1 In the light of the facts and submissions then on file the Opposition Division came to the conclusion that the opposition under Article 100(b) EPC was well founded. The description of the patent in suit contained six examples of deodorant perfume compositions which could be employed in accordance with the claimed use. Each of these compositions contained from 14 to 20 separate components, a grand total of 77 components being used. However, it was felt that little or no guidance was given as to how one skilled in the art might select other compositions which could also function as deodorant perfumes within the broad ambit of the claimed subject-matter.

3.2 In opposition procedure the burden rests on the opponent's shoulders to prove that the objections raised under Article 100 EPC have been substantiated. However, once the Opposition Division has decided to revoke the patent, the burden is shifted to the proprietor of the patent to demonstrate on appeal that the reasons for revoking the patent were not justified, i.e. that the Opposition Division's decision was wrong on its merits (see G 9 and 10/91, OJ EPO 1993, 408 and 420 respectively).

3.3 In the judgment of the Board the proprietor has discharged this burden. Accompanying the grounds of appeal the proprietor filed, in Appendix A, a series of experiments in which deodorant perfume composition 1, set out on page 10 of the patent in suit was modified. In the experiments set out in Table 1, a series of perfume compositions was prepared in which various constituents of said composition 1, having Raoult Variance Ratios (RVR) greater than 1.1, were replaced by other materials having approximately equal RVR values. In Table 2 a second series of perfumes were devised in which certain components of said composition 1 were replaced by materials having higher RVR values. Finally, Table 3 records modifications in which specified components are replaced with others having RVR value less than 1.1.

3.3.1 In accordance with each series of experiments, the modified deodorant perfume composition was included in a fabric washing powder. Shirts were washed and the third test in accordance with Claim 1 of the main request was carried out; the Odour Reduction Values (ORV) being measured. From the 12 experiments, only one failed to record an ORV of at least 0.5, as demanded by Claim 1. The composition which failed the test contained a replacement component having RVR less than 1.1.

3.3.2 The Appellant has thus shown that when setting out to devise a deodorant perfume composition which might satisfy the tests set out in Claim 1 of the patent in suit, the skilled man need not start out with a blank sheet of paper. By progressively modifying the compositions set out in the patent in suit with other materials having RVR value of at least 1.1, a reasonable degree of success might be expected. The one failure recorded in the reported experiments, which in any event relates to modifier with RVR less than 1.1, cannot be

considered to be unexpected in the light of the guidance given and is well within the margins of trial and error considered to be reasonable in decision T 226/85 (see Reasons, point 8).

3.3.3 The Board has decided to disregard the allegations of one Respondent that one skilled in the art could expect only a 1 in 100 chance of success when experimenting to find a new deodorant perfume composition (see VI above). The Appellant stated that he had no recollection of having made any such admission at the oral proceedings before the Opposition Division.

3.4 In the grounds of appeal, the Appellant argued that there was a conflict between the above mentioned decisions T 226/85 and T 292/85. The present Board follows the conclusions reached in decision T 435/91, referred to above, which involved some of the parties to the present appeal. In points 2.2.2 and 2.2.3 of T 435/91, it was concluded that there was no conflict between T 226/85 and T 292/85. The decisions which follow T 14/83 (OJ EPO 1984, 105) are all based on the common ground that the disclosure of an invention can be regarded as sufficient only if the skilled person, using the relevant common general knowledge, can reasonably expect that substantially all embodiments of a claimed invention can be put into practice.

3.5 Accordingly, in the light of Appellant's experiments referred to above and in the absence of counter experimental evidence from any of the Respondents, the Board is now convinced that the requirements of Article 83 EPC have been satisfied.

4. *Clarity and support (Article 84 EPC)*

4.1 Although neither contested in the proceedings nor a ground for opposition according to Article 100 EPC, it is the Board's duty to ensure that the amended claims satisfy the requirements of Article 84 and indeed all other articles of the EPC.

4.2 Having regard to the functional nature of the definitions of Claim 1, certain objections made under Article 100(b) EPC in relation to the sufficiency of the disclosure are inevitably linked to their support in the description required by Article 84 EPC insofar as both are related to the technical contribution made by the invention (cf. T 409/91, mentioned earlier). Bearing in mind the conclusions reached above in respect of Article 123 EPC and sufficiency of disclosure, the Board is satisfied that the claims of the main request are clear and have adequate support in the description.

5. *Priority (Article 87 EPC)*

5.1 The Board is convinced that GB application 48109/77 (16a) cannot be regarded as the first disclosure of the invention of the patent in suit. Although (16a) discloses on page 16 a composition closely similar to deodorant composition 1 of the patent in suit, it is essentially concerned with the products for personal washing. The three tests required by the patent in suit are not to be found in (16a). It is especially to be noted that the essential feature of the patent in suit, namely the concept of transferring deodorant properties to the skin from a laundered textile is wholly absent from the disclosure of (16a).

5.2 On the other hand, GB application 1286/78, filed as priority document to the patent in suit does relate (inter alia) to a method of suppressing human body malodour by contacting the skin with a fabric treated with a deodorant detergent composition (p. 7, lines 14 to 17). Moreover, the third test set out in Claim 1 of the patent in suit, involving wearing of shirts and subsequent assessment of body odour is described in detail from page 4, line 26 to page 6, line 19 of GB 1286/78. The other tests required by Claim 1 of the patent in suit, i.e. the Morpholine Test and the Deodorant Value Test (DVT) are to be found respectively on pages 12 to 15 and page 4 of the priority document.

5.2.1 It is recognised that the disclosure of GB 1286/78 corresponds approximately to the originally filed application which was of considerably broader scope than the granted patent in suit. It is also to be noted that in accordance with GB 1286/78, the DVT is used to assess the effectiveness of products for personal washing. The Appellant also admitted at the oral proceedings before the Board that probably only the Morpholine Test and the Odour Reduction Value Test were necessary to screen the detergent products for use in accordance with the invention. However, by additionally applying the DVT, the number of suitable products could well be reduced. Accordingly, since all the essential features of the subject-matter claimed in the main request are also disclosed in GB 1286/78, the Board concludes that the Appellant is entitled to the claimed priority.

5.3 Since the right to priority has been recognised, document (15) and others published after the priority date but before the European filing date do not belong to the state of the art within the meaning of Article 54(2) EPC.

6. Abuse (Article 55 EPC)

6.1 The question whether or not the terms "filing of the European patent application" in Article 55(1) EPC and "the date of filing the European patent application" in Article 89 EPC do in law have different meanings, as the rules of construing and interpreting statutes enjoins (cf. the Vienna Convention as discussed in G 05/83, OJ EPO 1985, 64), had been considered but deliberately left undecided in decision T 173/83, OJ EPO 1997, 468. The Board nonetheless observes that the detailed legal reasoning set out in the above decision (see para. 5 of the "reasons") would lead to the conclusion, which the Board in that case however did not find necessary to draw, that the terms do indeed bear a different meaning.

6.1.1 Whilst this Board fully understands the point submitted on behalf of one of the Opponents that, in the interests of harmonisation, a Swiss National Courts decision, also arriving at the above conclusion, should automatically be followed by the EPO, it cannot accept the premiss that the harmonisation of patent laws should proceed by adjusting and adapting the EPC, even where it was ambiguous, to the random individual findings of the national courts of the Contracting States.

6.2 However, in the present case the issue of non-prejudicial disclosure can be resolved by deciding whether the mistaken publication by the Brazilian Patent Office did in law amount to **evident abuse** under Article 55(1) EPC. In this connection, the Respondents submitted that since the Brazilian Patent Office was an agency of a sovereign government, it as well as its government was completely unfettered in its actions in relation to patent applications made to the EPO. Thus, given that sovereign governments and their agencies were completely free to do as they pleased, there could be,

a priori, "nothing reprehensible" in the mistaken publication. In answer to a question put to one of the Respondents by the Board, they submitted as a matter of law that all evident abuse under Article 55(1) EPC had to be reprehensible, and since in the instant case this could not apply, the Brazilian patent application did form part of the prior art.

6.3 In rebuttal the Appellant submitted that the Brazilian Patent Office had to follow Brazilian law, and that its mistaken publication of the patent application breached that law and was therefore reprehensible. Although he did not state it expressly, this submission implicitly acknowledged the truth of the proposition that all evident abuse under Article 55(1) EPC had to be reprehensible.

6.4 In the Board's judgment even if the publication of the patent application had infringed Brazilian law, that in itself may or may not be tantamount to an **evident abuse** in relation to the Applicant. All governments, as well as their agencies can infringe personal rights, including commercial rights of the kind here involved. However, not everything done in infringement of local laws, including Brazilian patent laws is of necessity an abuse in relation to Applicants' rights. In other words, the infraction or the observance of local laws is not relevant to, let alone decisive to, the existence of an evident abuse in relation to the Applicants' rights within the meaning of Article 55(1)(a) EPC. The reasons for this is that the term "abuse" as used in Article 55 EPC is not the equivalent of either a mere breach or a clear infringement of the Applicant's rights: the two terms are not coterminous. Whilst it may well be true that all abuse of an Applicant's rights also involves a

breach or infringement of his rights, the converse is not necessarily true. In the case of an abuse, as explained below, the state of mind of the "abuser" is of decisive importance.

6.5 The nature of that state of mind must either be engendered or at least be influenced by his personal and specific relationship with the Applicant. Normally where unauthorised disclosure of information takes place, there exists a legally enforceable obligation of confidence between the giver and the recipient of the confidential information. This confidentiality may arise from the circumstances of the disclosure or, as is more often the case, be brought about by an express confidentiality or secrecy agreement. In both cases the recipient of the information would know or should know the likely commercial and legal consequences of any unauthorised disclosure. Such a disclosure, made either with actual intent to cause harm (here commercial damage), or with actual knowledge (cf. constructive knowledge) that some such harm would or could reasonably be expected to result from it, would amount to an abuse in relation to the owner of the information. Different criteria apply to a disclosure by a recipient of information who does not stand in any personal or specific contractual relationship to the discloser but merely owes to the public a general duty to prevent disclosure. Such a disclosure made by dint of mere inadvertence or a genuine mistake, however unfortunate and detrimental its results may turn out to be, is not tainted with the necessary amount of actual or constructive knowledge and therefore guilty inadvertence so as to turn it into an evident abuse within terms of Article 55(1)(a) EPC.

6.6 In the present case, as confirmed by Dr Tong's declaration, the disclosure by the Brazilian Patent Office was a result of a "lamentable error", and lamentable errors or simple mistakes do not, as was said before, qualify as "abuse", let alone evident abuse, which is the standard of reprehensibility laid down by Article 55(1)(a) EPC. For the above reasons, the Board finds that the publication of the Brazilian application was not made in consequence to an evident abuse in relation to the Applicant or his legal predecessor and that, accordingly, the application does form part of the state of the art for the purposes of Articles 54 and 56 EPC.

7. *Problem and Solution*

7.1 The Board considers the Brazilian document (1) to be the closest state of the art; this was not disputed by the parties at the oral proceedings. For the purposes of this discussion, reference is made to the European translation of (1) which was first supplied by Respondent (03) on 6 July 1988.

7.2 Document (1) is concerned with a perfume having a specific deodorant value (Claim 1). Sub-claims relate to components of said perfume with particular reference to chemical classes thereof. Claim 15 relates to a deodorant detergent composition which is preferably in the form of a bar (Claim 19). Considerable detail is given concerning possible perfume components and reference is made both to the Morpholine Test (pp. 7 to 10) and to the DVT (pp. 11 to 14). The emphasis is on soap or non-soap detergent bars although mention is made on pages 39 to 40 of liquid soap, foam baths, shower gels and shampoos. Classes of detergent are set out in detail on pages 35 to 39 and also a variety of "detergent composition ingredients" (p. 40). It is

particularly to be noted that Example 24 of (1) relates to a deodorant perfume composition which is very close to Deodorant Composition No. 5 of the patent in suit.

- 7.3 Starting from (1) the problem to be solved is to devise a new use for the deodorant perfume compositions disclosed therein. The problem is solved by the use set out in Claim 1 of the patent in suit. Having regard to the experimental evidence in the patent itself and that filed with the grounds of appeal, the Board is satisfied that the problem has indeed been solved.

8. *Novelty*

- 8.1 The Board cannot accept the arguments of one of the Respondents that Example 24 of (1) destroys the novelty of the subject-matter claimed in the main request of the patent in suit. It is admitted that the deodorant perfume composition of said Example 24 is very close to deodorant composition No. 5 of the patent in suit; the only difference is that 14.25 parts triethyl citrate known from (1) are replaced by the same weight of dipropylene glycol. However, as indicated above, document (1) is essentially concerned with personal washing. There is no mention of the third test of the patent in suit nor of the possible transfer of a deodorant effect to the skin by wearing a garment laundered by a deodorant detergent composition.
- 8.2 None of the other documents cited in the course of either the examination or opposition procedure discloses the test and other essential features of the use presently claimed.

9. *Inventive step*

9.1 Although the application which finally led to the patent in suit was of broader scope, the granted patent and Claim 1 of the present main request relate only to the use of a deodorant detergent product for washing fabric in order to impart to said fabric the ability to suppress human body malodour when the fabric is worn as a garment. Although document (1), which represents earlier work by the same inventors, discloses deodorant perfumes closely similar to those used in the patent in suit, the emphasis in (1) is on the preparation of the deodorant perfumes per se and their use in products for personal washing.

9.1.1 A general reference to "a deodorant detergent composition" appears at the top of page 51 of (1). However, it is clear from the reference to potential uses at lines 9 to 11 of page 51 that only personal washing, bathing and shampooing are contemplated. The Respondents have pointed to references to "detergent adjuncts" on page 40 of (1), particularly their mention of "builders" and "fluorescers", which was regarded as a pointer to compositions for fabric washing. The fact, however, remains that there is not a single reference to the washing of fabrics in (1), nor any indication that the word "shampoo" should be construed as anything other than a composition for washing hair. Moreover, there is no evidence in the file that builders and fluorescers are exclusively employed in compositions for fabric washing and accordingly the Board can only take into consideration the general teaching of document (1) from which it has not been convinced that their use would have been excluded from products for personal washing. It is thus apparent that there is no hint in (1) of the

possibility of transferring deodorant properties to the skin by wearing a garment washed with a deodorant detergent composition.

9.2 Document (3) relates to detergent compositions for fabric washing which include a perfume substantive to cotton and linen. The actual perfumes to be used are referred to only in very general terms on page 2, lines 18 to 22. Cotton or linen garments washed with the detergent composition according to (3) are stated to retain a residual odour of perfume after a washing cycle (p. 1, lines 40 to 44). There is no suggestion that these perfumes are deodorant perfumes within the meaning of the patent in suit, i.e. perfumes which actually suppress the formation of body malodour rather than merely masking it. Furthermore, there is no hint that by wearing a garment washed with a composition according to (3), a deodorising effect might be transferred to the skin of the wearer.

9.3 The papers by Sturm and Mansfield both refer to the adhesion of perfumes to fabrics. SM1 has a table on page 3 setting out the adhesion period of various materials to fabrics which would be an indication of the time that the odour of the perfume would persist. Certain materials which are mentioned in the said table and elsewhere in SM1 also feature as components of the deodorant perfume compositions of the patent in suit. SM2 sets out the desirable properties of a perfume for use in detergent and fabric softening compositions. The actual fragrance and its persistence are deemed to be of importance according to the opening paragraph of SM2 as well as its substantivity to the fibres of the textile to be treated. A variety of perfume components are analysed in relation to their chemical structure and substantivity to textile fibres. Several of these materials are also mentioned in the patent in suit. In

order to function effectively, the odour should persist for several days after surviving a washing and rinsing cycle. Gas chromatography was used to assess which materials survived such a test.

- 9.3.1 The emphasis in both papers SM1 and SM2 is on the odour of the perfume, its substantivity to textile fibres and persistence after washing. It is recognised in SM2 that the function of the perfume can be to mask an unpleasant odour (e.g. p. 1, fourth paragraph). SM2 especially concentrates on the odour of the washed clothing (see conclusions, p. 14). On the other hand, the Appellant has argued that clothing washed with a deodorant composition in accordance with the patent in suit need not in itself have a significant odour, since the deodorant perfumes employed therein do not merely mask the malodour but actually suppress its formation. The essential feature is that, by wearing the laundered clothing, a deodorant effect is transferred to the skin.
- 9.4 Document (6) and other prior art mentioned during the appeal do not give any indication of a deodorant effect being obtained by wearing clothing washed by a deodorant washing composition.
- 9.5 A Respondent has cited decision T 112/92 which concluded that although an inherent but hidden later use of a known substance may be novel, a claim to such a use will yet lack inventive step if the prior art indicates a well established link between the earlier and later uses. The subject-matter considered in T 112/92 related to the concurrent use of a known material as thickener and stabiliser for emulsions. There is no indication whatsoever that the use currently claimed, which involves imparting deodorant properties to a human body by wearing a garment laundered with a deodorant detergent, is in any way an inherent but hidden use as

understood in T 112/92, e.g. as might perhaps have been obtained by wearing a garment laundered with the composition known from document (3) (see also G 2/88, OJ EPO 1990, 93, Chapter 10). There is thus no analogy between the cases.

9.6 Decision T 98/94 referred to by one Respondent, related to a deodorant composition for application to surfaces other than human skin. The composition was found to lack inventive step over document (1) having regard to the fact that similar detergents were already known in the prior art both for washing human skin and for domestic surfaces. The suppression of odours by direct contact of the detergent with the surface, encountered in case T 98/94, is not analogous to the indirect deodorant effect of the patent in suit.

9.7 It is apparent from the foregoing that the leap, from employing a deodorant perfume in a fabric washing detergent composition in order to impart a pleasant and persistent odour to the laundered clothes, to the effect of deodorising human skin by wearing clothes laundered by such a detergent composition is in no way foreshadowed by the prior art. An inventive step can accordingly be recognised for Claim 1 of the main request. The remaining claims derive their patentability from Claim 1.

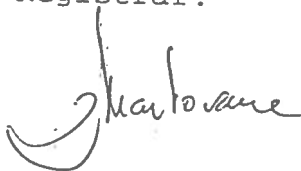
10. Since the Board have decided to allow the Appellant's main request, it is no longer necessary to consider the auxiliary requests.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to maintain the patent on the basis of the main request with consequential amendment to the description if necessary.

The Registrar:



P. Martorana

The Chairman:



P. A. M. Lançon



28.5.98

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15.4.98