

Internal distribution code:

- (A) Publication in OJ
(B) To Chairmen and Members
(C) To Chairmen
(D) No distribution

**Datasheet for the decision
of 12 January 2010**

Case Number: T 0282/07 - 3.3.07

Application Number: 98921398.8

Publication Number: 0973487

IPC: A61K 7/06

Language of the proceedings: EN

Title of invention:
Hair treatment compositions

Patent Proprietors:
Unilever PLC, et al

Opponents:
L'OREAL

Headword:
-

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 56

Keyword:
"Inventive step (no)"

Decisions cited:
-

Catchword:
-



Case Number: T 0282/07 - 3.3.07

D E C I S I O N
of the Technical Board of Appeal 3.3.07
of 12 January 2010

Appellants:
(Opponents)

L'OREAL
14, Rue Royale
F-75008 Paris (FR)

Representative:

Casalonga, Axel
Bureau Casalonga & Josse
Bayerstraße 71/73
D-80335 München (DE)

Respondents:
(Patent Proprietors)

Unilever PLC
Unilever House
Blackfriars
London
Greater London EC4P 4BQ (GB)

and

Unilever N.V.
Weena 455
NL-3013 AL Rotterdam (NL)

Representative:

James, Helen Sarah
Unilever Patent Group
Colworth House
Sharnbrook
Bedford MK44 1LQ (GB)

Decision under appeal:

Interlocutory decision of the Opposition
Division of the European Patent Office posted
29 November 2006 concerning maintenance of the
European patent No. 0973487 in amended form.

Composition of the Board:

Chairman: S. Perryman
Members: D. Semino
F. Rousseau

Summary of Facts and Submissions

I. The appeal by the opponents (appellants) lies against the decision of the Opposition Division posted on 29 November 2006 to maintain European Patent No. 0 973 487 in amended form. The patent was based on European application No. 98 921 398.8, originating from international application PCT/EP98/01768 published as WO 98/043599 and was granted on the basis of 9 claims, independent claim 1 and dependent claim 9 reading as follows:

"1. A hair treatment composition which is a shampoo comprising one or more cleansing surfactants or is a conditioner comprising one or more conditioning surfactants, said composition comprising a silicone component which comprises a silicone gum with a viscosity greater than 1 McSt, a silicone fluid with a viscosity of less than 100 kcSt, and an amino functionalised silicone characterised in that the amino functionalised silicone is present as 0.1 to 10% by weight of the silicone component."

"9. A composition according to any one of claims 1 to 8, which is a shampoo composition comprising at least one cleansing surfactant selected from anionic, amphoteric and zwitterionic surfactants and mixtures thereof, and further comprising a cationic deposition polymer."

II. A notice of opposition had been filed on 18 August 2004, in which the revocation of the patent in its entirety was requested on the grounds of Article 100(a) EPC (lack of novelty as well as lack of inventive step).

The opposition was supported *inter alia* by the following documents:

D1: US-A-5 567 428

D3: WO-A-92/21319

D4: US-A-5 290 545

D5: JP-A-8-217644

III. The Opposition Division decided that the proprietors' main request to reject the opposition could not be allowed, as claim 1 as granted covered conditioner compositions which lacked novelty over the disclosure of either document D1 or D3, but considered that the set of claims according to the Auxiliary Request filed at the oral proceedings on 27 September 2006 before it with a corresponding amended description met the requirements of the EPC. The set of claims according to the Auxiliary Request contained 8 claims, independent claim 1 resulting from the combination of granted claims 1 and 9 and reading as follows:

"1. A hair treatment composition which is a shampoo composition comprising at least one cleansing surfactant selected from anionic, amphoteric and zwitterionic surfactants and mixtures thereof, and further comprising a cationic deposition polymer said composition comprising a silicone component which comprises a silicone gum with a viscosity greater than 1 McSt, a silicone fluid with a viscosity of less than 100 kcSt, and an amino functionalised silicone characterised in that the amino functionalised silicone is present as 0.1 to 10% by weight of the silicone component."

IV. The reasoning of the Opposition Division regarding inventive step of claim 1 of the Auxiliary Request can be summarised as follows:

- (a) D1, which represented the closest state of the art, disclosed in example X a shampoo composition comprising an anionic surfactant, a silicone gum and a silicone fluid. Claim 1 of the Auxiliary request differed therefrom in that the silicone gum had a viscosity greater than 1 McSt and in that the composition further comprised an amino functionalised silicone present as 0.1 to 10% by weight of the silicone component.
- (b) In the absence of direct comparative data between example X of D1 and the claimed invention, the problem had to be considered as the provision of further shampoo compositions with good conditioning properties.
- (c) Although D1 disclosed conditioning compositions comprising an amino functionalised silicone in examples I to III, said document did not give any hint to incorporate such a silicone into the shampoo compositions described therein, for which it suggested the use of hydrophobic silicones as conditioning agents. Further, although D4 and D5 disclosed the use of amino silicones as conditioning agents in shampoo compositions, the fact remained that D1 limited the use of silicone conditioners in shampoo to the hydrophobic ones, which suggestion would not be ignored by the skilled person. For these reasons the subject-matter of claim 1 of the Auxiliary Request

involved an inventive step over the available prior art.

V. The appellants filed a notice of appeal on 9 February 2007 and paid the appeal fee on the same day. With the statement setting out the grounds of appeal filed on 5 April 2007 the appellants submitted the following document:

D8: GB-A-2 289 686

VI. The proprietors (respondents) counter-argued the arguments of the appellants in their letter dated 7 August 2007.

VII. In a communication accompanying the summons to attend oral proceedings the Board addressed the points which needed considerations at the oral proceedings and mentioned that it considered at least D1, D4 and D8 (if admitted into the proceedings) as possible candidates for the closest state of the art and that it seemed that no experimental results were present in the application as filed which could show advantages for the composition as claimed in the pending request.

VIII. With letter dated 8 December 2009 the respondents confirmed that they would not be represented at the oral proceedings and requested a decision to be made based on the written submissions, without filing any further documents, nor submissions.

IX. Oral proceedings before the Board were held on 12 January 2010 in the absence of the respondents.

X. The appellants' arguments can be summarised as follows:

- (a) D4 could be considered as the closest state of the art, since it belonged to the same technical field as the contested patent and addressed the same problem, namely improving the conditioning properties of compositions for the treatment of hair. It disclosed in the examples shampoos comprising an anionic surfactant and a mixture of an amino functionalised silicone with a silicone gum having a viscosity above 1 McSt. The examples of D4 differed from the claimed composition in the presence of a silicone fluid, the presence of a cationic deposition polymer and the proportion of the amino functionalised silicone in the silicone component. However, D4 itself disclosed that the silicone gum could be used in admixture with volatile silicone fluids and that it was preferred to add cationic polymers to the composition. Moreover, no effect had been shown related to the proportion of amino functionalised silicone in the silicone component and no comparison had been provided, so that the problem to be solved could only be seen in the provision of further compositions. The general teaching of D4 was only that of adding a mixture of a silicone gum and an amino functionalised silicone without any limitation to a specific quantity, so that the claimed concentration range amounted to an arbitrary selection within the teaching of D4, which the skilled person would do as a matter of normal routine, taking into account also the costs of the components. In view of this an inventive activity could not be acknowledged. Moreover, both

D1 and D5 disclosed silicone components with conditioning properties containing the amino functionalised silicone in the claimed proportion.

- (b) Alternatively, taking D1 as the closest state of the art and considering the shampoos disclosed therein, in particular the one of example X, and the disclosure in the description regarding the viscosity of silicone gums, it had to be acknowledged that the only difference between the products of D1 and the claimed composition concerned the presence of an amino functionalised silicone in a specific fraction of the silicone component. The problem to be solved would still be that of providing further compositions. The skilled person would find in D1 both the suggestion to use amino functionalised silicones as drying agents and alternative silicone components corresponding to the ones of the invention in examples I-III. He would also find a suggestion in D4 to use a mixture of a silicone gum and an amino functionalised silicone to improve the conditioning properties of a shampoo. In view of these disclosures the skilled person would arrive at the subject-matter of claim 1 without an inventive activity.

- (c) D8, which could alternatively be used as the closest state of the art, disclosed in example 41 a conditioning shampoo composition comprising all the components of the claimed composition with the exception of the silicone gum. The skilled person aiming at providing alternative shampoos with improved properties would consider the already

mentioned teaching of D4 to come to the claimed subject-matter.

XI. The respondents' arguments can be summarised as follows:

- (a) D8 could not be considered as the closest state of the art since the document as a whole related solely to the production of micro-emulsions and out of 74 formulations only one related to a shampoo composition.

- (b) D1, which was clearly the closest state of the art, did not disclose a shampoo composition comprising all three required silicone elements together, whose combination provided improved conditioning properties. The addition of an amino functionalised silicone to the composition of example X of D1 was not obvious since D1 did not provide any hint to include the amino functionalised silicone into the shampoos and even taught away from doing so by indicating only the use of hydrophobic silicones as supplementary conditioning agents in shampoos. This fact made also the disclosure of D4 irrelevant. Moreover, prior to the present invention it was believed that that amino functionalised silicones could not be incorporated together with silicone gums, while the invention recognised that the combination of the three ingredients allowed the deposition onto the hair of the right quantity of amino functionalised silicone as a conditioning active, therefore finding the right balance between an excessive release which could cause stickiness and an insufficient delivery. In particular, the

inclusion of a low viscosity silicone acted as a buffer against an excessive deposition. In addition, conditioning compositions and shampoos being fundamentally different compositions, one could not routinely apply to shampoos actives known for use in conditioner compositions.

Despite of the indication in the communication of the Board that document D4 was a candidate for the closest state of the art, the respondents did not provide any arguments on inventive step starting from D4.

XII. The appellants (opponents) requested that the decision under appeal be set aside and that the European patent be revoked.

XIII. The respondents (patent proprietors) had requested in writing that a decision be made based on the written submissions.

Reasons for the Decision

1. The appeal is admissible.

Requests

2. While the appellants in view of the amended version of the patent which was upheld by the Opposition Division clearly requested that the decision under appeal be set aside and that the European patent be revoked, no explicit request related to the desired fate of the appealed decision and of the patent in suit was formulated by the respondents.

- 2.1 In their response to the statement setting out the grounds of appeal, the respondents argued against the arguments of the appellants for lack of inventive step of the patent in suit as maintained, while in their letter dated 8 December 2009 they requested that a decision be made based on the written submissions. No other submission was filed by the respondents and no amended documents were filed as a basis for a possible auxiliary request.
- 2.2 In view of this the respondents' submissions can only be interpreted as an implicit request that the appeal be dismissed and the appealed decision be upheld. It is also clear that in case this request were not allowed, they did not wish to have any further amended request ruled on by the Board, since they did not submit any.
- 2.3 It is clear that, in the absence of any further documents on the side of the respondents, the Board has only the power to decide on the patent as maintained by the Opposition Division, which independently of the requests of the respondents, must be done by the Board in view of the admissible appeal by the opponents.

Amendments and novelty

3. The Board is satisfied that the subject-matter of amended claim 1 meets the requirements of Articles 123(2) and (3) EPC and is novel in view of the cited prior art. Since the claim fails on another ground, it is, however, not necessary to give reasoning in this respect.

Inventive step

4. *Closest prior art*

4.1 The closest prior art for assessing inventive step is normally a prior art document disclosing subject-matter conceived for the same purpose or aiming at the same objective as the claimed invention and having the most relevant technical features in common, i.e. requiring the minimum of structural and functional modifications (Case Law of the Boards of Appeal of the European Patent Office, 5th edition, 2006, I.D.3.1 and 3.2).

4.2 The patent in suit relates to hair treatment compositions containing particular types of silicones, which can provide the composition with conditioning benefits (paragraph [0001]). The hair treatment compositions comprise a silicone component which comprises a silicone gum with a viscosity greater than 1McSt, a silicone fluid with a viscosity of less than 100 kcSt and an amino functionalised silicone, wherein the amino functionalised silicone is present as 0.1 to 10% by weight of the silicone component (paragraph [0006]). The composition of claim 1 as maintained by the Opposition Division has been limited to a shampoo composition comprising a cleansing surfactant selected from anionic, amphoteric and zwitterionic surfactants and mixtures thereof, and a cationic deposition polymer. The compositions are primarily intended for topical application to the hair and/or scalp of a human subject to improve hair fibre surface properties such as smoothness, softness, manageability, cuticle integrity and shine (paragraph [0079]).

4.3 Document D1 concerns a topical personal care composition, said composition comprising a polysiloxane-grafted adhesive polymer, a volatile, water insoluble solvent for said polysiloxane-grafted polymer and a nonvolatile drying aid for said polysiloxane grafted polymer (claim 1). Since the adhesive polymers are known to provide hair hold and style hold benefits (column 1, lines 18-20), but the known compositions containing them are sticky or tacky for the time required to dry once they have been applied (column 2, lines 4-15), it is the object of D1 to provide hair styling compositions with decreased drying time without any substantial loss of hair hold performance once the composition is dried to completion (column 2, lines 16-23).

4.3.1 As drying agents alkylamino substituted silicones including e.g. amodimethicone are disclosed (column 13, lines 41-56). Surfactants useful in compositions according to D1 include anionic, nonionic, cationic, zwitterionic and amphoteric surfactants (column 19, lines 33-35). The compositions can also comprise a water soluble cationic organic polymer conditioning agent (column 24, line 65 - column 27, line 39).

4.3.2 An optional component of the compositions is a nonvolatile, silicone conditioning agent which is not intermixed in the same phase as the volatile solvent of the polysiloxane-grafted copolymer (column 23, lines 37-40). Suitable useful components of the silicone conditioning agent are silicone fluid with a preferred viscosity of between 10 and 100 kcSt at 25°C (column 23, lines 55-67) and silicone gums, wherein by silicone gums polyorganosiloxane materials are meant

with a viscosity greater than or equal to 1 McSt at 25°C (column 24, lines 47-51).

4.3.3 In example X of D1 (column 34, lines 9-45) a shampoo composition is disclosed comprising an anionic surfactant (ammonium lauryl sulfate) and a silicone component (premix) comprising a silicone gum and a silicone fluid with a viscosity of 350 cSt. Examples I-III instead (column 30, line 39 - column 31, line 47) disclose hair styling/conditioning rinse compositions, wherein the silicone component (silicone premix) comprises a silicone fluid (decamethyl cyclopentasiloxane), a silicone gum and an amino functionalised silicone (amodimethicone) in a quantity of around 5% of the mixture of the three silicones and around 1% of the whole silicone premix.

4.4 Document D4 discloses a shampoo composition comprising 10-80% by weight of a carrier; 0.5-5.0% by weight of a mixture of a polydiorganosiloxane gum and an amine functional siloxane polymer and 7-35% by weight of a water soluble anionic surfactant, said composition having improved shelf stability and hair conditioning properties as compared to the same composition not containing amine-functional siloxane polymer (claim 1). Such mixtures have been found to improve the wet combing characteristics of hair while at the same time providing durable conditioning effects (column 2, lines 20-23).

4.4.1 The polydiorganosiloxane gums are insoluble polydiorganosiloxane which have viscosities greater than 1 McSt at 25°C, preferably greater than 5 McSt at 25°C (column 3, lines 61-65). These gums may be used

alone as well as in admixture with one or more volatile ingredients such as cyclic silicones with a viscosity at 25°C of the order of 2.5 to 6.0 cSt (column 3, line 66 - column 4, line 4), in which latter case the claimed composition of D4 comprises a silicone fluid and a silicone gum with the desired viscosities and an amino functionalised silicone in combination. Further conditioners may be added, such as organic cationic components, which overlap largely with the cationic deposition polymers of claim 1 of the patent in suit as maintained (cf. e.g. the quaternary nitrogen derivatives of cellulose ethers, the homopolymers of dimethyldiallylammonium chloride and the copolymers of acrylamide and dimethyldiallylammonium chloride in D4, column 6, lines 36-58 and in paragraphs [0049]-[0063] of the patent in suit).

- 4.4.2 No limitation to the quantities of the silicones in the silicone components is given in the general part of the disclosure (claim 1 and "Summary of the invention" in column 2, lines 16-35) where it is stressed that the improved wet combing characteristics of hair together with the durable conditioning effect are obtained only by virtue of the mixture of a silicone gum and an amine functional silicone. In specific embodiments it is mentioned that the mixture includes 5-50% by weight of the polydiorganosiloxane gum based on the total weight of the mixture present in the composition (claim 2).
- 4.4.3 The shampoo of claim 1 of the patent in suit differs from the ones of D4 only in that a specific proportion is given for the amino functionalised silicone (0.1 to 10% by weight of the silicone component) and that a cationic deposition polymer is specifically included.

- 4.5 Document D8 is related to a method of making microemulsion blends having an average particle size of from 0.001 to 0.05 microns whereby the blend comprises at least one of a low amino content silicone, a resin or an MQ resin and a surfactant having a high phase inversion temperature (page 1, lines 13-18). The invention of D8 is based upon the discovery that functionalized silicones such as amino functional silicone fluids or gums are capable of forming microemulsions and may be blended with surfactants having a high phase inversion temperature and the blend processed such that the mixture forms a microemulsion (page 4, lines 1-5).
- 4.5.1 The microemulsions of D8 provide beneficial results when used in personal care products formulations (page 3, lines 10-12), such as hair conditioners and conditioning shampoos among others (page 11, lines 29-32). In particular, the microemulsions prepared by the method of D8 provide conditioning benefits to a variety of personal care products (page 31, lines 26-30).
- 4.5.2 Examples 40 and 41 of D8 (pages 22 and 23) relate to conditioning shampoos. In particular the shampoo of example 41 comprises an anionic surfactant (ammonium lauryl sulfate), an amino silicone gum, a silicone fluid (dimethicone copolyol) and a cationic deposition polymer (guar hydroxypropyltrimonium chloride, cf. paragraph [0061] of the patent).
- 4.6 While both D4 and D8 mention conditioning benefits, D8 is mainly concerned with the formation of a microemulsion (for several possible uses) and only D4

addresses as the main object the provision of a shampoo with durable conditioning effects. Moreover, while both D1 and D4 disclose individually all components of the composition of claim 1 of the patent as maintained, D1 discloses a silicone component comprising the three crucial silicones which form part of the claimed composition only in a hair style/conditioning rinse and only D4 discloses a shampoo composition comprising the three silicones in combination.

- 4.7 Therefore D4 is the document conceived for the same purpose as the claimed invention and having the most relevant technical features in common with it, so that it is to be considered as the closest state of the art. As detailed under point 4.4 (*supra*) the shampoo composition of claim 1 of the disputed patent as maintained by the Opposition Division differs from the shampoo compositions of D4 only in that a selection of the proportion of the amino functionalised silicone in the silicone component, namely 0.1 to 10% by weight of the silicone component, has been made and a cationic deposition polymer has been added.

5. *Problem solved*

- 5.1 The general problem to be solved according to the patent in suit is that of providing hair treatment compositions containing a silicone component with excellent conditioning benefits (paragraph [0005]). This problem was apparently already posed in D4 and solved by the compositions disclosed therein (column 1, lines 6-10; column 2, lines 17-23).

- 5.2 No comparative tests have been provided in order to compare the conditioning performance of the claimed shampoo with the one of a shampoo according to D4 with a proportion of amino functionalised silicone in the silicone components outside the selected range of claim 1 of the patent in dispute and not including a cationic deposition polymer. Moreover, no single example is present in which the conditioning benefits of the claimed compositions have been tested, the only two examples present in the patent as maintained by the Opposition Division providing only two shampoo recipes, but not their performance.
- 5.3 With respect to the proportion of amino functionalised silicone in the silicone component, the patent in suit states that a limit of 10% by weight of the silicone component is chosen "firstly in order to minimise the cost of the silicone component, but also to ease emulsification of the silicone component" (paragraph [0025]). While a minimisation of the cost as such with no technical benefits cannot be taken as the technical problem to be solved, it needs to be checked whether it can be accepted that the choice of the specific proportion allows an easier formation of the emulsion.
- 5.4 Also in this case, no examples are available to show an improvement in emulsification with respect to D4, nor even any peculiar property in the emulsification of the recipes disclosed in the patent in suit. Due to this, also this aspect mentioned in the patent as related to the choice of the proportion of amino functionalised silicone in the silicone component cannot be taken as the basis for the technical problem to be solved.

- 5.5 With respect to the addition of a cationic deposition polymer, no surprising or synergistic effect has been mentioned in the patent in suit, nor discussed by the respondents in their submissions.
- 5.6 A further possible advantage related to the combination of the three silicones has been discussed by the respondents in their arguments related to the inventiveness of the composition with respect to a combination of D1 and D4 and concerns the possibility of depositing onto the hair the right quantity of amino functionalised silicone as a conditioning active, therefore finding the right balance between an excessive release which could cause stickiness and an insufficient delivery. In the submissions of the respondents, however, this argument is related to the combination of the three silicones, which is already disclosed in D4, and neither to the choice of a specific proportion of amino functionalised silicone in the silicone component, nor to the addition of a cationic deposition polymer. Moreover, apart from the fact that such an advantage was neither mentioned, nor implied in the application as filed, also in this case no tests have been filed to support the allegation of the respondents, so that also this alleged advantage cannot be taken into consideration in determining the problem underlying the patent in dispute (Case Law, *supra*, I.D.4.2).
- 5.7 In summary, there is neither an advantage, nor a surprising effect which has been proven as deriving from the distinguishing features taken alone or in combination. In the absence of further information in

the patent and in the submissions of the respondents, the problem to be solved is to be regarded as the provision of further conditioning shampoo compositions with respect to the ones disclosed in D4.

6. *Obviousness*

6.1 It remains to be decided whether the skilled person starting from D4 and looking for further compositions would come in an obvious manner to the claimed composition.

6.2 D4 itself does not limit in the general part of the disclosure the composition of the silicone mixture with respect to the relative quantities of its components in any respect. In D4 in order to obtain beneficial conditioning effect it is only crucial that a mixture of a silicone gum and an amine functional silicone is used (column 2, lines 17-23; claim 1). When it comes to exemplified compositions, it discloses silicone mixtures with 5 to 50% by weight of the polyorganosiloxane gum based on the total weight of the silicone mixture (claim 2; column 8, lines 31-35), however without mentioning any possible disadvantage in operating with any possible different proportion of silicone gum and amino functionalised silicone.

6.3 With respect to the general disclosure of D4, the arbitrary selection of a specific interval for the proportion of amino functionalised silicone which is within the possible alternatives contemplated by the document, has no technical effect and can affect, if at all, only the cost of the product cannot be considered to be inventive.

6.4 The respondents within their arguments on inventive step with respect to D1 combined with D4 submitted that prior to the present patent it was believed that amino-functionalised silicones could not be incorporated together with silicone gums, therefore implying the presence of a technical prejudice in the art. Apart from the lack of a demonstration by the respondents, who has in such a case the burden of proof, that such a prejudice existed (Case Law, *supra*, I.D.9.2), the available prior art demonstrates the contrary both for the general combination of the two silicones and also for the specific claimed proportion.

6.4.1 D4 itself discloses in the main claim shampoo compositions comprising a mixture of silicone gums and amino functionalised silicones. D1 not only mentions the two classes separately, but in examples I-III relating to hair styling/conditioning rinse compositions discloses a mixture of the two silicones with the amino functionalised silicones in the right proportion (see point 4.3.3, *supra*). Moreover, D5 discloses (all references refer to the English translation) shampoo compositions comprising an amino-modified silicone and a water-insoluble silicone derivative (claim 1), in which the water-insoluble silicone derivative can be a mixture of two dimethylpolysiloxanes (paragraphs [0027], [0028] and [0047]) of high and low molecular weights (see in particular silicone derivative emulsion A*3 in Table 1) and therefore of high and low viscosity. In D5 very large intervals are mentioned for the possible weight ratios of the water-insoluble silicone derivative with respect to the amino functionalised silicone

- (paragraph [0049]), explicitly mentioning the value of 100 (which corresponds to around 1% of amino functionalised silicone in the silicone component).
- 6.4.2 The available prior art demonstrates therefore that, contrary to the submissions of the respondents, there was no prejudice against incorporating amino functionalised silicones together with silicone gums, but it was known to do that and there was no hurdle in considering a proportion of amino functionalised silicone falling into the claimed range.
- 6.5 Furthermore, the addition of cationic conditioning polymers falling under the cationic deposition polymers of claim 1 to the shampoo compositions including the silicone components is taught in D4 itself as a possible option (see point 4.4.1, *supra*), so that such an addition merely for providing further conditioning shampoo compositions cannot involve an inventive activity.
- 6.6 For all these reasons, it is concluded that the composition of claim 1 of the patent as maintained by the Opposition Division does not involve an inventive step.
7. Given that document D8 is not necessary to substantiate the lack of inventive step, the question regarding its admissibility into the proceedings does not need to be answered.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar

The Chairman

S. Fabiani

S. Perryman