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**Datasheet for the decision  
of 9 May 2012**

**Case Number:** T 1879/10 - 3.3.07

**Application Number:** 06718313.7

**Publication Number:** 1835882

**IPC:** A61K8/26

**Language of the proceedings:** EN

**Title of invention:**  
ANTIPERSPIRANT ACTIVE

**Applicant:**  
The Procter & Gamble Company

**Headword:**

**Relevant legal provisions:**  
EPC Art. 83, 84, 111(1)

**Keyword:**  
"Sufficiency of disclosure (yes)"  
"Clarity (yes)"  
"Declaration of no search - not justified"

**Decisions cited:**

**Catchword:**



Case Number: T1879/10 - 3.3.07

**D E C I S I O N**  
**of the Technical Board of Appeal 3.3.07**  
**of 9 May 2012**

**Appellant:** The Procter & Gamble Company  
(Applicant) One Procter & Gamble Plaza  
Cincinnati, OH 45202 (ETATS-UNIS D'AMERIQUE)

**Representative:** Hampton, Matthew John  
Hoyng Monegier LLP  
Rembrandt Tower, 31st Floor  
Amstelplein 1  
1096 HA Amsterdam (PAYS-BAS)

**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted 18 March 2010  
refusing European patent application No.  
06718313.7 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman:** J. Riolo  
**Members:** D. Semino  
D. T. Keeling

## Summary of Facts and Submissions

I. The appeal lies from the decision of the examining division announced at the oral proceedings on 9 March 2010 refusing European patent application No. 06 718 313.7. The application as filed comprised 10 claims, independent claims 1 and 8 reading as follows:

"1. A method for making an enhanced efficacy antiperspirant active, said method comprising the steps of:

(a) providing an aqueous solution of aluminum hydroxyhalide salt having a Band III polymer concentration of at least about 20%;

(b) adding to the aqueous solution of step (a) an aqueous solution of a monomeric aluminum salt to form a mixture; and

(c) rapidly drying the mixture to form a product."

"8. An enhanced efficacy antiperspirant active comprising an aluminum-only salt having a Band III polymer concentration of at least 20%, an aluminum to anion ratio of from 1.1:1 to 1.8:1 and a level of monomeric aluminum of from 2% to 20% of the total aluminum."

II. The application was filed under the PCT procedure and the EPO acting as the International Search Authority declared that no search report would be established because the claims of the application failed to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out. In that declaration it was stated that the term "Band III polymer concentration" was unknown and so unclear that it could not constitute a technical feature suitable for defining the claimed subject-matter and that there

were no other technical feature in the claims which could make the subject-matter of the independent claims searchable. Even after entry into the European phase and during examination before the EPO no search was carried out.

III. The decision under appeal was based on a set of 9 claims filed with letter of 5 February 2010. Independent claims 1 and 7 of that set read as follows (additions with respect to original claims 1 and 8 are indicated in bold, deletions in strike-through):

"1. A method for making an enhanced efficacy antiperspirant active, said method comprising the steps of:

(a) providing **a flowing stream of** an aqueous solution of aluminum hydroxyhalide salt having a Band III polymer concentration of at least ~~about~~ **20% as analyzed using Gel Permeation Chromatography, wherein the aluminium hydroxyhalide salt is present in the aqueous solution in an amount of at least 10% and wherein the aluminium hydroxyhalide salt is an aluminium chlorohydroxide selected from the group consisting of aluminium chlorohydrate and sesquichlorohydrate;**

~~(b) adding to the aqueous solution of step (a)~~**providing a flowing stream of** an aqueous solution of a monomeric aluminum salt **and mixing said stream with the stream of step a) via a static mixer** to form a mixture **with a contact time before step c) of from 1 sec to 30 minutes;** and

(c) rapidly drying the mixture **in a spray drier** to form a **powdered** product."

"7~~8~~. An enhanced efficacy antiperspirant active **derived from the method according to any one of claims 1 to 6, said active** comprising an aluminum-only salt having a

Band III polymer concentration of at least 20%, an aluminum to anion ratio of from 1.1:1 to 1.8:1 and a level of monomeric aluminum of from 2% to 20% of the total aluminum."

IV. In the decision under appeal the following documents filed by the applicant were *inter alia* cited:

D2: EP-A-0 256 831

D3: WO-A-2005/081751

D4: WO-A-2005/102258

D5: US-A-5 718 876

D6: US-A-5 358 694

D7: US-A-4 359 456

D8: K. Laden et al. "Antiperspirants and deodorants", Marcel Dekker, Inc., pages 147-153

V. The decision of the examining division can be summarised as follows:

- a) With regard to the feature "having a Band III polymer concentration of at least 20%" no reference was given in the description to a chromatography method generally accepted in the art, firstly for qualifying a Band III in a chromatogram, secondly for quantifying said Band III in order to provide concentrations for meaningful compounds. The experimental method of gel permeation chromatography (GPC) detailed on pages 7 and 8 of the application as filed was disclosed with reference to a single chromatogram, which was incomplete since it was not related to any specific disclosure in the description and was considered insufficient to validate an analytical method. Moreover, no compound of reference was given to calibrate the method and its resolution

remained vague. Additionally, none of the eight documents filed by the applicant during examination proceedings disclosed in non-ambiguous terms the meaning of the Band III and whether it might permit calculations on concentrations leading to the discrimination value of 20%. In particular, the GPC methods described in those documents differed from one another and from the one in the application, so that the chromatograms obtained could not be the same. Moreover, Band III compounds were considered as not favourable for antiperspirants in some documents, which was in sharp contrast with the disclosure in the application under analysis. In view of that, the aluminium hydroxyhalide salts of the claims on file were insufficiently disclosed, which resulted in insufficiency of the whole independent claim.

- b) Since the term "Band III polymer concentration" related to a technical feature which was insufficiently disclosed, the limitation of "20%" related to said concentration was unclear.
- c) In view of the above and of the fact that no search had been done, an opinion on novelty could not be given.
- d) An opinion on inventive step could be formed disregarding the feature "having a Band III polymer concentration of at least 20%". D5 could be seen as the closest state of the art. Its example 1 disclosed a method which differed from the one on claim 1 in that the dissolution time for aluminium was not disclosed (but could be considered as implicitly the same) and aluminium chloride was used instead of aluminium

chlorohydrate. Since the distinguishing feature had not been demonstrated to provide an unexpected technical effect, the technical problem was the provision of an alternative method. The replacement of the aluminium salt was obvious in view of D2. The same held true for product claim 7, so that both independent claims were not inventive.

VI. The applicant (appellant) filed a notice of appeal against the above decision. With the statement setting out the grounds of appeal the appellant filed an additional document (D9: EP-A-0 191 628) and argued essentially as follows:

- a) Since the detection of polymeric aluminium species as bands using chromatography was known as attested by documents D5-D8 submitted during examination proceedings, the application of numerics to those bands was also known as attested by documents D5-D7 and document D9 confirmed that the term "Band III polymer concentration" was known in the art, the pending claims could be the subject of a search. In any case, that term was only one component of one step of the method, which included several other features, which at the very least should render practicable the issue of a partial search.
- b) As documents D5-D9 showed that a skilled person would be conscious of the term "Band III polymer concentration" and the application disclosed through examples 1-3 one way in which an aluminium salt having the required Band III polymer concentration could be obtained, the appellant had discharged its duty of disclosure. The gel

permeation methodology on pages 7 and 8 of the application as filed had been objected as being non-standard. However, there was no requirement in the EPC to that effect, nor had that requirement been established by the case law. Moreover, the disclosed methodology did include very specific process conditions and could be reproducibly performed by the skilled person. In any case, any information deemed absent would be provided by citations D5-D9. D7, in particular, attested that it was not necessary to include a chromatogram to render the term understandable. Finally, the lack of disclosure of a calibration step was simply a failure to provide superfluous details and should therefore not be objectionable. For those reasons the requirements of Article 83 were met.

- c) As the term "Band III polymer concentration" was clear and sufficiently disclosed, the analysis of inventive step in the decision, which disregarded that feature, was not relevant.

VII. In a communication sent in preparation of oral proceedings, the Board expressed its preliminary opinion that the feature "a Band III polymer concentration of at least 20%" was sufficiently disclosed and clear, so that the objections under Article 83 and 84 on which the refusal had been based did not hold, and that claims 8 and 9 of the set of claims filed with letter of 5 February 2010 were not clear.

VIII. With letter of 19 March 2012 the appellant filed a new set of claims, which differed from the set of claims on which the appealed decision was based only in that dependent claims 8 and 9 had been deleted, and



confirmed that it would not wish to be heard in oral proceedings in case of remittal of the case to the first instance.

- IX. Thereafter the scheduled appeal proceedings were cancelled.
- X. The appellant requested in writing with letter of 19 March 2012 that the decision under appeal be set aside and that the case be remitted to the first instance for the performance of a search and further prosecution on the basis of the set of claims filed with that letter.

### **Reasons for the Decision**

1. The appeal is admissible.
2. *Sufficiency of disclosure*
  - 2.1 The sufficiency of disclosure of the claimed antiperspirant active and its method of production was disputed in the appealed decision in view of the presence of the feature "having a Band III polymer concentration of at least 20%" for the aluminium salt contained in the active.
  - 2.2 Method claim 1 (to which product claim 7 refers) specifies the method of measurement of that polymer concentration by the insert "as analyzed using Gel Permeation Chromatography" and the details of the method of measurement are given in the description of the application as filed under the heading "Gel Permeation Chromatography (GPC)" (page 7, line 20 to page 8, line 7), including the specification of the

chromatographic columns, their packing, the mobile phase, its flowrate, the auxiliary devices, the preparation of the samples, the software used for calculation of the relative peak areas and their area ratios, the definition of Bands I to IV and the determination of the concentration of Band III polymers.

- 2.3 With such a detailed and precise measurement procedure and in the absence of clear evidence of the contrary, there is no reason to think that such a measurement method cannot be considered as significant and reliable.
- 2.4 Moreover, once the method is explained in detail and does not give rise to substantial doubts based on verifiable facts, there is no need to add a chromatogram in a specific defined case or more than one chromatogram in different conditions in order to make the method practicable by a skilled person.
- 2.5 All the other additional doubts expressed in the appealed decision to support lack of sufficiency are also not conclusive, as they are either not relevant or not substantiated by verifiable facts.
- 2.6 It is not relevant for sufficiency of disclosure whether the method given in the application and other GPC methods disclosed in the prior art (e.g. as in D5, column 3, line 55 to column 4, line 11 and D7, columns 3 to 5) give different results, as long as it is defined in the application as filed which measurement method must be used. The possible differences in the results could instead become relevant, when the claimed product and method are compared with those known from the prior art.

- 2.7 In any case, the presence of substantial differences in the results according to the measurement method remains, with the available evidence, a simple allegation, since it is not corroborated by verifiable facts. In this respect it is noted that the documents supplied by the appellant during examination and appeal proceedings mention the measurement of Band III polymer concentration by means of GPC methods, but never give evidence that the result of these measurements should be strongly dependent on the details of the measurement method. Even the consideration that "minor variations in particle size range and pore size distribution of the column packing material may lead to slight differences in relative retention times" (D2, page 4, lines 19-20; D7, column 4, lines 45-47) cannot be taken as a hint in that respect, firstly because "slight" differences are mentioned and secondly because slight differences in relative retention times do not necessarily result in variations of the Band III proportion.
- 2.8 The lack of data about the resolution of the GPC method can also not lead to insufficiency of disclosure, as there is no requirement either in the EPC or in the case law, that the resolution of each measurement method should be given in order for the disclosure to be sufficient. Such a resolution could instead become relevant for defining the breadth of the claim and comparing the claimed subject-matter with what was previously known. Similar considerations apply to the specification of a calibration procedure.
- 2.9 The fact that in some documents (e.g. the post-published documents D3 and D4 or the prior art document D5) it is not desired to have high concentrations of

Band III polymer, but other bands are favoured for satisfactory antiperspirant properties, which has been considered in the appealed decision as being in sharp contrast with the present application, is also not relevant for the sufficiency of disclosure, as long as a method for the measurement of the Band III polymer concentration is defined in the application. Such considerations may instead have an impact on the comparison of the antiperspirant properties of the claimed product with products of the prior art and therefore on the analysis of inventive step.

2.10 The Board concludes therefore that with the evidence available on file at this stage it cannot be established that the presence in the independent claims of the feature "having a Band III polymer concentration of at least 20%" renders the claim unworkable. The requirements of Article 83 EPC are therefore met in this respect.

### 3. *Clarity*

3.1 Lack of clarity of the feature "having a Band III polymer concentration of at least 20%" has been objected in the appealed decision on the same basis as lack of sufficiency.

3.2 The reference in method claim 1 (to which product claim 7 refers) to the measurement method ("as analyzed using Gel Permeation Chromatography") and the presence of the detailed method in the description (page 7, line 20 to page 8, line 7, see also point 2.2 above) are considered sufficient to render the claims clear.

3.3 In particular, the non-inclusion of the full measurement method (as on pages 7 and 8 of the

application as filed) in the claims is justified in the present case by the requirement that the claims be concise, in spite of the general principle that the claims must be clear in themselves (see Case Law of the Boards of Appeal of the EPO, 6th edition 2010, II.B.1.1.2). This is the case here as the method is clearly identified in the description, it is referred to in the claim and its inclusion would lead to lack of conciseness.

3.4 For these reasons also the requirements of Article 84 EPC are met with respect to the feature "having a Band III polymer concentration of at least 20%".

4. *Inventive step - no search*

4.1 The analysis of inventive step in the appealed decision was made by disregarding the feature "having a Band III polymer concentration of at least 20%" for the aluminium salt contained in the antiperspirant active, as that feature was found to be unclear, and taking into consideration only the documents cited by the appellant during examination proceedings, since no search had been accomplished.

4.2 Having come to the conclusion that the disputed feature is clear and fulfils the requirements of the EPC, the Board can neither agree with the analysis of inventive step undertaken in the appealed decision, nor with the fact that the claims of the application in view of that feature failed to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out.

4.3 Under such circumstances, no further analysis of the case is meaningful before a search is carried out.

Remittal of the case to the first instance for such a search to be performed and substantive examination to be continued is therefore necessary.

## 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 for the performance of a search and further prosecution on the basis of the set of claims filed with letter of 19 March 2012.

The Registrar:

The Chairman:



L. Fernández Gómez

J. Riolo

Decision electronically authenticated