# PATENTAMTS

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# Datasheet for the decision of 2 July 2009

T 0474/08 - 3.3.10 Case Number:

Application Number: 97952830.4

Publication Number: 0958267

IPC: C07C 31/125

Language of the proceedings: EN

#### Title of invention:

Highly branched primary alcohol compositions, and biodegradable detergents made therefrom

#### Patentee:

SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.

#### Opponent:

OXENO Olefinchemie GmbH BASF Aktiengesellschaft SASOL Technology (Pty) Ltd.

#### Headword:

Branched primary alcohol composition/SHELL

# Relevant legal provisions:

EPC Art. 100(c), 84

#### Keyword:

"Main and auxiliary requests 1 and 2: undue combination of features"

"Auxiliary requests 3 to 5: amendment introduces lack of clarity"

#### Decisions cited:

G 0009/91, T 0301/87

#### Catchword:



Europäisches **Patentamt** 

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Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0474/08 - 3.3.10

DECISION of the Technical Board of Appeal 3.3.10 of 2 July 2009

Appellant: SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ

(Patent Proprietor) B.V.

Intellectual Property Division

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D-21244 Buchholz (DE) Decision under appeal:

Decision of the Opposition Division of the European Patent Office posted 17 January 2008 revoking European patent No. 0958267 pursuant to Article 102(1) EPC 1973.

## Composition of the Board:

Chairman: R. Freimuth Members: J.-C. Schmid

J.-P. Seitz C. Komenda F. Blumer - 1 - T 0474/08

# Summary of Facts and Submissions

- I. The Appellant (Proprietor of the patent) lodged an appeal on 31 January 2008 against the decision of the Opposition Division posted on 17 January 2008 revoking European patent No. 958 267 and on 16 May 2008 filed a written statement setting out the grounds of appeal.
- II. Notices of opposition were filed against the granted patent by the Respondents I, II and III (Opponents (1), (2) and (3) respectively) requesting revocation of the patent-in-suit in its entirety on the grounds of lack of novelty and inventive step (Article 100(a) EPC), of insufficient disclosure (Article 100(b)), and of extending the subject-matter of the patent in suit beyond the content of the application as filed (Article 100(c) EPC).
- III. The Opposition Division held that claims 1 and 9 of the then pending main request did not meet the requirements of Article 123(3) EPC, claim 1 further not complying with Article 123(2) EPC. In particular, the Opposition Division found that the granted claims comprised the feature "a branched primary alcohol composition having from 11 to 36 carbon atoms" which was no longer a requirement in amended claim 1, thus infringing the requirement of Article 123(3) EPC.
- IV. At the oral proceedings before the Board, held on 2 July 2009, the Appellant defended the maintenance of the patent in suit in amended form on the basis of a main and five auxiliary requests, the main and auxiliary requests 1 and 2 being submitted on

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16 May 2008 and auxiliary requests 3, 4 and 5 being submitted on 21 May 2009.

Independent claim 1 of the main request read as follows:
"1. A branched primary alcohol composition, having from
11 to 36 carbon atoms and at least 75wt% of the
molecules in the primary alcohol composition having
chain lengths ranging from 14 to 21 carbon atoms and an
average number of branches per molecule of from 0.7 to
3.0, said branching comprising methyl and ethyl
branches, said composition comprising less than 0.5
atom % of quaternary carbon atoms, and wherein from 5
to 30% of the number of branches in the alcohol are
ethyl branches and said composition has from 5 to 25%
branching on the C2 carbon position relative to the
hydroxyl carbon atom."

Claim 1 of auxiliary request 1 differed from claim 1 of the main request only in that the composition further had "from 10 to 50% of the number of branches on the  $C_3$  position."

Claim 1 of auxiliary request 2 differed from claim 1 of auxiliary request 1 only in that the upper limit of the range defining the average number of branches per molecule was 2.3.

Claim 1 of auxiliary requests 3 to 5 differed from claim 1 of the main and auxiliary requests 1 and 2, respectively, in that the feature "having from 11 to 36 carbon atoms" was replaced by the feature "in the  $C_{12}$  to  $C_{20}$  range" and that the upper limit of the range defining the carbon atoms of the molecules in the primary alcohol composition was 18. Claim 1 of

auxiliary request 5 furthermore differed from claim 1 of auxiliary request 2 in that the lower limit of the range defining the average number of branches per molecule was 1.5.

With respect to the issue of added subject-matter, the V. Appellant no longer referred to page 10 of the application as filed for the support of the feature "having from 11 to 36 carbon atoms" in claim 1, but referred exclusively to page 39, line 15 to 18 where a branched primary alcohol composition having from 11 to 36 carbon atoms was disclosed as starting material for the production of surfactants. All the features of the claimed composition were disclosed in isolation in the application as filed. Hence, the feature that the branched primary alcohols of the composition had from 11 to 36 carbon atoms was intended to be read in combination with the other features of the composition disclosed in the application as filed, in particular with the feature that at least 75wt% of the molecules in the primary alcohol composition had chain lengths ranging from 14 to 21 carbon atoms, as disclosed on page 10 of the application as filed.

With respect to the amendment in auxiliary requests 3 to 5 relating to the feature defining the composition as being "in the  $C_{12}$  to  $C_{20}$  range", it was clear that the indicated carbon number range applied only to the branched primary alcohols present in the claimed composition and that the claim would be clearly interpreted by the skilled person as encompassing only compositions excluding any branched primary alcohol outside this carbon number range.

VI. As regards added subject-matter of claim 1 of the main request, the Respondents submitted that the features defining the claimed compositions were not disclosed in combination in the application as filed. Furthermore, the feature that "at least 75 wt% of the molecules in the primary alcohol composition have chain lengths ranging from 14 to 21 carbon atoms" was disclosed only in combination with a particular average chain length per molecule.

Claim 1 of auxiliary request 3 to 5 lacked clarity because the expression "a branched primary alcohol composition in the  $C_{12}$  to  $C_{20}$  range" was open to various interpretations. The Appellant's interpretation that the claimed composition consisted of only branched primary alcohol in the  $C_{12}$  to  $C_{20}$  range, thus excluding any branched primary alcohol outside that carbon number range was inconsistent with the specification of the patent. The sole basis of the feature "in the  $C_{12}$  to  $C_{20}$ range" in the application as filed concerned the preparation of the branched primary alcohols with olefins in the  $C_{11}$  to  $C_{19}$  range. However, it was also indicated that the branched primary alcohol compositions were prepared with an olefin feed generally not consisting of 100% olefins within the specified carbon number range, only at least 50 wt% of the olefins being within the stated carbon number range.

VII. The Appellant requested that the decision under appeal be set aside and that the case be remitted to the department of first instance for further prosecution on the basis of the main request filed on 16 May 2008 or, subsidiarily, on the basis of one of the auxiliary requests 1 and 2, also filed on 16 May 2008, or, more

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subsidiarily, on the basis of the auxiliary requests 3 to 5 filed on 21 May 2009.

The Respondents requested that the appeal be dismissed.

VIII. At the end of the oral proceedings the decision of the Board was announced.

#### Reasons for the Decision

1. The appeal is admissible.

Main and auxiliary requests 1 and 2

- 2. Amendments (Article 100(c) EPC)
- 2.1 The patent in suit has been opposed inter alia on the ground that the subject-matter of the patent extended beyond the content of the application as filed (Article 100(c) EPC). In particular, the feature in granted claim 1 "a branched primary alcohol composition having from 11 to 36 carbon atoms" was objected to for having no basis in the application as filed.

Claim 1 of the sole request pending in the decision under appeal did not comprise this feature, so that the Opposition Division took no decision on whether or not this feature was supported by the application as filed. Nevertheless, the Opposition Division decided that the subject-matter of the claim which was amended during the opposition proceedings by the deletion of this feature extended the protection conferred by the

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European patent, contrary to the requirement of Article 123(3) EPC.

This feature has been now reintroduced into claim 1 of the main and auxiliary requests 1 and 2 pending in these appeal proceedings. Thus, in claim 1 of those requests the branched primary alcohol composition is defined inter alia by having from 11 to 36 carbon atoms. Hence, it must be examined by the Board as to whether or not the ground for opposition under Article 100(c) EPC was justified by the presence of such a feature in the claims.

- 2.2 In order to determine whether or not the subject-matter of a claim in a patent extends beyond the content of the application as filed it has to be examined whether that claim comprises technical information which a skilled person would not have directly and unambiguously derived from the application as filed.
- 2.3 The Appellant referred exclusively to page 39, line 14 to 17 of the application as filed to support this feature. This passage comprises the disclosure of a  $C_8$  to  $C_{36}$ , particularly a  $C_{11}$  to  $C_{19}$  branched primary alcohol composition as a starting material for the preparation of anionic surfactants.

Irrespective of whether or not this passage provides a support for a branched primary alcohol composition per se having from 11 to 36 carbon atoms, the indicated carbon number range is not disclosed in combination with the other features characterising the claimed composition, e.g. that at least 75 wt% of the molecules in the primary alcohol composition have chain lengths ranging from 14 to 21 carbon atoms or that the

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composition has from 5 to 25% branching on the C<sub>2</sub> carbon position relative to the hydroxyl carbon atom. Thus, the feature that "at least 75 wt% of the molecules in the primary alcohol composition have chain lengths ranging from 14 to 21 carbon atoms" is disclosed on page 10, lines 27 to 30 of the application as filed only in combination with a particular average chain length per molecule, namely 11 to 21, and therefore not for any branched primary alcohol composition having from 11 to 36 carbon atoms.

The Appellant argued that all features of claim 1 defining the composition, though disclosed in isolation in the application as filed, were intended to be read in combination.

However the finding of whether or not the subjectmatter of a claim in a patent extends beyond the
content of the application as filed is not a matter of
what was intended in an application, but rather the
matter which technical information a skilled person
would directly and unambiguously derive from the
content of the application as filed. In the present
case, those features in claim 1 are not originally
disclosed in combination, so that the specific
combination of the features now required provides the
skilled person with technical information which is not
directly and unambiguously derivable from the
application as filed.

Thus, the application as filed does not provide a proper basis for defining the composition as now defined in claim 1, claim 1 being an undue combination of features generating fresh subject-matter.

2.4 Therefore the Board concludes that claim 1 extends the subject-matter claimed beyond the content of the application as filed justifying the ground for opposition pursuant to Article 100(c) EPC, so that the main and the auxiliary requests 1 and 2 must be rejected.

Auxiliary requests 3 to 5

## 3. Clarity (Article 84 EPC)

Although Article 84 EPC may not be raised as ground for opposition in the sense of Article 100 EPC, Article 101(3)(b) EPC stipulates that, if taking into consideration the amendments made by the Proprietor of the European patent during opposition (appeal) proceedings, the patent and the invention to which it relates do not meet the requirements of the European Patent Convention, the patent shall be revoked. Thus, according to established jurisprudence of the Boards of Appeal, the Board has the power to examine an objection based on Article 84 EPC, as long as the objection arises out of the amendments made to the granted patent (see decisions T 301/87, OJ EPO 1990, 335, point 3.8 of the reasons; G 9/91, OJ EPO 1993, 408, point 19 of the reasons). Therefore it must be examined whether or not the amendments introduced into the granted claims are in keeping with the requirements of Article 84 EPC, in particular with that of clarity.

Claim 1 has been amended to read "A branched primary alcohol composition in the  $C_{12}$  to  $C_{20}$  range...".

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From this wording it is firstly not clear whether or not the fresh carbon number range, which following the construction of the claim's wording qualifies the composition, applies to any component comprised in the composition or only to the branched primary alcohols present in the composition.

According to the Appellant, the skilled person would immediately understand that the indicated range only applies to the branched primary alcohols present in the composition. However, even if one were to follow the Appellant's reading, it would still not be clear whether the definition of the composition should be interpreted in a restrictive way, i.e. requires any branched primary alcohols comprised in the composition to fall within the indicated range, thereby excluding the presence of branched primary alcohols outside this range, or whether it is to be interpreted in a open way, i.e. the composition comprising branched primary alcohols in the indicated range, but may also comprise branched primary alcohols outside this range. Consequently, the amendment made in the claim is ambiguous and lacks clarity.

3.2 The Appellant argued that the wording was indented to mean a composition comprising only branched primary alcohols in the specified carbon number range, i.e. with the exclusion of the presence of any primary alcohols outside this range.

However, giving a particular plausible interpretation of the claim cannot overcome the deficiency in the present case, since the definition of the composition in claim 1 remains open to another interpretation being

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likewise plausible, i.e. that the composition may comprise further components including branched primary alcohol outside the indicated range.

Moreover, the Board notes that paragraph [0037] of the patent specification indicating that the olefin feed, which is the starting material for producing the branched primary alcohol, generally does not consist of 100% olefins within the specified carbon number range, as such purity is not commercially available, thus necessarily producing branched primary alcohols not all of them falling within the specified range. Therefore the Appellant's interpretation appears rather inconsistent with the description of the patent in suit.

3.3 In these circumstances, the Board arrives at the conclusion that the amendment carried out in claim 1 of auxiliary requests 3 to 5 leads to a lack of clarity of the claim. Hence, auxiliary requests 3 to 5 should be rejected (Article 84 EPC).

# Order

# For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

C. Rodríguez Rodríguez

R. Freimuth