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# Datasheet for the decision of 24 June 2008

**Case Number:** T 1863/06 - 3.3.03

**Application Number:** 00901499.4

**Publication Number:** 1149133

**IPC:** C08L 101/00

**Language of the proceedings:** EN

**Title of invention:**
Synthetic polymers comprising additive blends with enhanced effect

**Patentee:**
Ciba Holding Inc.

**Opponent:**
BASF SE

**Headword:**
-

**Relevant legal provisions:**
EPC Art. 123(2)

**Relevant legal provisions (EPC 1973):**
-

**Keyword:**
"Amendments - added subject-matter (yes) - (all requests)"

**Decisions cited:**
-

**Catchword:**
-

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**Case Number:** T 1863/06 **-** 3.3.03

# D E C I S I O N
**of the Technical Board of Appeal 3.3.03**
**of 24 June 2008**

| | |
|---|---|
| **Appellant:** (Patent Proprietor) | Ciba Holding Inc.<br>Klybeckstrasse 141<br>CH-4057 Basel (CH) |
| **Representative:** | - |
| **Respondent:** (Opponent) | BASF SE<br>D-67056 Ludwigshafen (DE) |
| **Representative:** | Isenbruck, Günter<br>Isenbruck, Bösl, Hörschler, Wichmann, Huhn<br>Patentanwälte<br>Theodor-Heuss-Anlage 12<br>D-68165 Mannheim (DE) |
| **Decision under appeal:** | **Decision of the Opposition Division of the European Patent Office dated 11 October 2006 and posted 25 October 2006 revoking European patent No. 1149133 pursuant to Article 102(1) EPC.** |

**Composition of the Board:**

**Chairman:** R. Young
**Members:** W. Sieber
E. Dufrasne

## Summary of Facts and Submissions

I. The mention of the grant of European patent No. 1 149 133, in respect of European patent application No. 00901499.4, based on International application PCT/EP2000/000010, in the name of Ciba Specialty Chemicals Holding Inc. (now Ciba Holding Inc.), filed on 4 January 2000 and claiming priorities from EP 99810011 (11 January 1999) and CH 135699 (23 July 1999), was published on 17 March 2004 (Bulletin 2004/12). The granted patent contained 19 claims, whereby Claim 1 read as follows:

"A composition, which comprises
a) a synthetic polymer subject to oxidative, thermal or light-induced degradation,
b) at least one additive selected from the stabiliser, antistatic agent, nucleating agent, biocide and/or flame retardant group, and
c) at least one polymeric dispersing or solvating agent having amphiphilic properties."

The remaining claims are not relevant for the decision and will therefore not be discussed in further detail.

II. A notice of opposition was filed by BASF AG (now BASF SE) on 17 December 2004 requesting revocation of the patent in its entirety on the grounds that the claimed subject-matter was neither novel nor inventive and that the patent did not disclose the invention in a manner sufficiently clear and complete for it to be carried out a by person skilled in the art (Article 100(a) and (b) EPC).

The following documents were - *inter alia* - cited during the opposition procedure:

D1: EP 0 717 079 A2;

D2: Abstract and English translation of JP 06 016824 A;

D6: English translation of JP 08 081534 A; and

D9: Römpp Lexikon Chemie, 10. Auflage, 1996, Georg Thieme Verlag Suttgart New York, page 180.

III. At the oral proceedings of 11 October 2006 before the Opposition Division, the Proprietor filed new Claims 1 to 16. Claim 1 differed from Claim 1 as granted in that "antistatic agent" was deleted as an option from component b) and component c) was further specified to read as follows:

"c) at least one polymeric dispersing or solvating agent based on polyacrylates, polysiloxanes, polyvinyl acetate or on block copolymers containing at least one block based on acrylate, acrylic acid or methacrylate having amphiphilic properties".

IV. In a decision which was announced orally on 11 October 2006 and issued in writing on 25 October 2006, the Opposition Division revoked the patent for lack of novelty in view of D6.

As regards the Opponent's objection under Article 100(b) EPC that the definition of "polymeric dispersing or solvating agents having amphiphilic

properties" was so vague that it did not allow the invention of the patent to be carried out and, related to this, that there was a real difficulty in assessing whether one was working inside or outside the scope of the claims, the Opposition Division held that this objection was based on Article 84 EPC which was not a ground of opposition. Apart from that, the Opposition Division was of the opinion that a person skilled in the art knowing the full content of the opposed patent and being aware of the general knowledge as illustrated by eg D9 was able to work the full scope of the claimed invention.

V. On 12 December 2006, the Appellant (Proprietor) filed a notice of the appeal against the above decision with simultaneous payment of the prescribed fee.

With the statement of grounds of appeal, the Appellant filed on 20 February 2007 a new set of claims (Claims 1 to 15) whereby Claim 1 read as follows:

"A composition, which comprises
a) a synthetic polymer subject to oxidative, thermal or light-induced degradation,
b) at least one additive selected from the stabiliser, nucleating agent, biocide and/or flame retardant group;
wherein the stabiliser is selected from the group consisting of phenolic antioxidants, aminic antioxidants, UV absorbers, light stabilisers, metal deactivators, phosphites, phosphonites, hydroxylamines, nitrones, thiosynergists, peroxide-scavenging compounds, compounds of the benzofuran-2-one type and/or PVC heat stabilisers; and

c) at least one polymeric dispersing or solvating agent based on polyacrylates, polysiloxanes, polyvinyl acetate or on block copolymers containing at least one block based on acrylate, acrylic acid or methacrylate having amphiphilic properties."

According to the Appellant, the subject-matter of Claims 1 to 15 was novel and inventive over the cited prior art, in particular D6.

VI. The arguments of the Respondent (Opponent) filed with its reply dated 17 September 2007 may be summarized as follows:

(a) According to the definition in the patent specification (paragraphs [0019] and [0020], polymeric dispersing or solvating agents having amphiphilic properties were polymers which had polar and non polar groups in the same molecule. This definition applied for example to polydimethylsiloxane having polar -SiOSi- and non polar Si-$CH_3$ groups in the molecule. On the other hand, the Appellant had argued before the Opposition Division that polydimethylsiloxane was not an amphiphilic polymer. Thus, there arose a real difficulty in assessing whether one was working inside or outside the scope of the claims. Therefore, the invention was not disclosed in a manner sufficiently clear for it to be carried out by a person skilled in the art.

(b) The subject-matter of Claim 1 was not novel over Examples 1 and 2 of D1. Particularly, Example 1 disclosed a composition comprising a styrene-

butadiene block copolymer (equivalent to component a) of Claim 1), a hindered phenolic antioxidant (equivalent to component b) of Claim 1) and polydimethylsiloxane which was considered to be equivalent to component c) of Claim 1.

The subject-matter of Claim 1 was also not novel over D2 which disclosed in the abstract a composition comprising 100 parts by weight polypropylene (equivalent to component a) of Claim 1), 0.5-60 parts by weight of an organopolysiloxane containing vinyl groups (equivalent to component c) of Claim 1) and 0.05-2 parts by weight of a sorbitol type nucleating agent (equivalent to component b) of Claim 1).

(c) Further, the Respondent raised an inventive step objection against the claimed subject-matter and various objections against the amendments in the claims under Article 84 EPC and Rule 57a EPC 1973.

VII. On 24 June 2008, oral proceedings were held before the Board.

(a) At first the discussion focussed on the question as to whether or not the definition of component c) in Claim 1 ["polymeric dispersing or solvating agent having amphiphilic properties"] was intelligible to a person skilled in the art. According to the Respondent the definition of "amphiphilic" in paragraph [0019] of the patent specification exceeded the meaning a person skilled in the art would normally attribute to this term (eg the definition given in D9). Thus,

polydimethylsiloxane having both polar and non polar groups in the molecule was considered as an amphiphilic polymer. The difficulty in assessing whether one was working inside or outside the scope of the claims led to an objection under Article 83 EPC. After having heard the parties on this issue, the Board indicated that the requirements of Article 83 EPC appeared to be met.

(b) The Respondent maintained its novelty objection in view of D1 (Examples 1 and 2) and D2 already submitted in writing. In addition, it pointed out that D2 disclosed not only polydimethylsiloxane (corresponding to component c) of Claim 1) but disclosed also alternatives for this polymer, namely polymethylphenyl siloxane and polysiloxanes which had undergone eg amino-modification, or polyether-modification (reference was made to page 5 of the English translation). These compounds would be in any case thought of as amphiphilic polymers. Thus, the teaching of D2, including the alternatives for polydimethylsiloxane, was novelty destroying to the claimed subject-matter.

(c) The Appellant was of the opinion that the claimed subject-matter was novel over both D1 and D2. It also pointed out that it was astounded by the new novelty argument based on the alternative compounds mentioned in the description of D2. Since this aspect was raised for the first time at the oral proceedings, the Appellant wished to file a new request.

(d) In view of the intended filing of a new request, the Board indicated its preliminary opinion that present Claim 1 also did not meet the requirements of Article 123(2) EPC since the combination of features, in particular with respect to the more narrowly defined components b) and c), was not supported by the application as originally filed. This objection should be taken into account when drafting new claims.

(e) The Appellant withdrew its main request filed on 20 February 2007 and submitted three new claim sets, namely a main request (Claims 1-14 headed "Hauptantrag"), a 1st auxiliary request (Claims 1-14 headed "1. Hilfsantrag") and a 2nd auxiliary request (Claims 1-14 headed "2. Hilfsantrag").

(f) Claim 1 of the main request read as follows:

"A composition, which comprises
a) a synthetic polymer subject to oxidative, thermal or light-induced degradation,
b) at least one additive selected from the stabiliser, nucleating agent, biocide and/or flame retardant group; wherein the stabiliser is selected from the group consisting of phenolic antioxidants, aminic antioxidants, UV absorbers, light stabilisers, metal deactivators, phosphites, phosphonites, hydroxylamines, nitrones, thiosynergists, peroxide-scavenging compounds, compounds of the benzofuran-2-one type and/or PVC heat stabilisers; and

c) 0.01 to 10% based on the weight of the synthetic polymer, of at least one polymeric dispersing or solvating agent based on polyacrylates or polysiloxanes containing long-chain side-groups."

(g) Claim 1 of the 1st auxiliary request read as follows:

"A composition, which comprises
a) a synthetic polymer subject to oxidative, thermal or light-induced degradation,
b) at least one additive selected from the stabiliser, nucleating agent, biocide and/or flame retardant group; wherein the stabiliser is selected from the group consisting of phenolic antioxidants, aminic antioxidants, UV absorbers, light stabilisers, metal deactivators, phosphites, phosphonites, hydroxylamines, nitrones, thiosynergists, peroxide-scavenging compounds, compounds of the benzofuran-2-one type and/or PVC heat stabilisers; and
c) 0.01 to 10% based on the weight of the synthetic polymer, of at least one polymeric dispersing or solvating agent based on polyacrylates, polyvinyl acetate or on block copolymers containing at least one block based on acrylate, acrylic acid or methacrylate having amphiphilic properties."

(h) Claim 1 of the 2nd auxiliary request read as follows:

"A composition, which comprises
a) a synthetic polymer subject to oxidative, thermal or light-induced degradation,
b) at least one additive selected from the stabiliser, nucleating agent, biocide and/or flame retardant group; wherein the stabiliser is selected from the group consisting of phenolic antioxidants, aminic antioxidants, UV absorbers, light stabilisers, metal deactivators, phosphites, phosphonites, hydroxylamines, nitrones, thiosynergists, peroxide-scavenging compounds, compounds of the benzofuran-2-one type and/or PVC heat stabilisers; and
c) 0.01 to 10% based on the weight of the synthetic polymer, of at least one polymeric dispersing or solvating agent based on polyacrylates containing long-chain side-groups."

(i) The Appellant argued that the amendments were further limitations based on the application as originally filed. On the other hand, the Respondent pointed out that the combination of features in Claim 1 of each request had no basis in the application as originally filed. Consequently, all requests were not allowable.

VIII. The Appellant requested that the decision under appeal be set aside and the patent be maintained on the basis of the main request (headed "Hauptantrag") or, in the alternative, of the 1st or 2nd auxiliary request (headed "1. Hilfsantrag" and "2. Hilfsantrag"), all filed during the oral proceedings of 24 June 2008.

The Respondent requested that the appeal be dismissed.

## Reasons for the Decision

1. The appeal is admissible.

2. *Procedural matter*

The Appellant filed a new main request as well as a 1st and a 2nd auxiliary request at the oral proceedings of 24 June 2008. The necessity further to amend the claims submitted with the statement of grounds of appeal had become apparent for the first time at the oral proceedings (see point VII(b) to VII(d), above). Since, furthermore, the new requests were based on the previous request, the Board was satisfied that the other party could properly deal with the late filed requests. Consequently, the new main request and the 1st and 2nd auxiliary requests were admitted into the proceedings for consideration. Nor did the Respondent raise any objection in this connection.

3. *Main request*

3.1 In Claim 1 of the main request (point VII(f), above) components b) and c) have been further specified in that

- the stabiliser has to be selected from the group consisting of phenolic antioxidants, aminic antioxidants, UV absorbers, light stabilisers, metal deactivators, phosphites, phosphonites, hydroxylamines, nitrones, thiosynergists,

peroxide-scavenging compounds, compounds of the benzofuran-2-one type and/or PVC heat stabilisers;

- the polymeric dispersing or solvating agent has to be based on polyacrylates or polysiloxanes containing long-chain side-groups; and
- the amount of component c) has to be 0.01 to 10% based on the weight of the synthetic polymer.

3.2 Although each of the newly introduced features of Claim 1 is individually disclosed in the application as originally filed, it is conspicuous to the Board that the **combination** of features as now claimed is not disclosed in the application as originally filed, neither in the claims nor in the description.

3.2.1 Thus, the passage at page 14, 2nd paragraph of the application as originally filed merely states: "Interesting compositions are those where component (b) is a stabiliser selected from the group consisting of phenolic antioxidants, aminic antioxidants, UV absorbers, light stabilisers, metal deactivators, phosphites, phosphonites, hydroxylamines, nitrones, thiosynergists, peroxide-scavenging compounds, compounds of the benzofuran-2-one type and/or PVC heat stabilisers, such as …". This passage contains no explicit or implicit hint that these stabilisers should be combined with a specific subclass of dispersing or solvating agents, let alone with a specific amount thereof.

3.2.2 As regards the nature of component c), Claim 8 as originally filed reads: "A composition according to claim 1, wherein component (c) is a dispersing or solvating agent based on polyacrylates or polysiloxanes

containing long-chain side-groups." In this connection it might be worth mentioning that Claim 1 as originally filed is identical with Claim 1 as granted (point I, above) and describes components b) and c) in rather general terms. Thus, it is clear from the claim structure (Claim 8 as originally filed only refers back to Claim 1) that the feature described in dependent Claim 8 as originally filed refers only to preferred embodiments of component c) but bears no relation to other preferred embodiments of the claimed invention. The same applies to the passage on page 20, 1st paragraph of the application as originally filed (paragraph [0033] of the patent specification) which is just the exact counterpart to Claim 8 as originally filed.

3.2.3 Claim 10 as originally filed reads: "A composition according to claim 1, wherein component (c) is present in an amount from 0.01 to 10%, based on the weight of component (a)." Again, this feature is disclosed without any relation to other preferred embodiments.

3.2.4 It is clear from the above analysis that the **combination** of specific components b) with specific components c), let alone in combination with a specific amount of compound c), is not clearly and unambiguously derivable from the application as originally filed. Or, in other words, the amendment creates a criticality as to the combination of the subclasses for components b) and c) which was not disclosed in the application as originally filed. In this connection, the content of the application as originally filed must not be treated as something in the nature of a reservoir from which it would be permissible to combine different individual

features pertaining to preferred embodiments in order to create artificially a particular new embodiment, unless the application as originally filed itself suggests such a combination of features. In the present case, however, the combination of features as now claimed is neither explicitly nor implicitly suggested by the application as originally filed. Therefore, Claim 1 of the main request contravenes Article 123(2) EPC.

3.3 In summary, the combination of features introduced into Claim 1 of the main request violates Article 123(2) EPC. Hence, for this reason alone the main request has to be refused.

3.4 Under these circumstances it is not necessary to investigate as to whether or not the claims of the main request contain further deficiencies, eg the deletion of the term "having amphiphilic properties" for component c) in Claim 1.

4. *1st and 2nd auxiliary request*

4.1 Just as in the case of Claim 1 of the main request, Claim 1 of both the 1st and 2nd auxiliary requests (point VII(g) and VII(h), above) combines a specific subclass of stabilisers with a specific subclass of dispersing or solvating agents in a specific amount thereof. These claims differ from Claim 1 of the main request only in that the subclass of dispersing or solvating agents is defined slightly differently. Nevertheless, the objection that this new **combination** of features, namely the combination of a specific subclass of stabilisers with a specific subclass of

dispersing or solvating agents in a specific amount thereof, is not clearly and unambiguously derivable from the application as originally filed is equally valid for these claims. Thus, for the same reasons as given for Claim 1 of the main request, Claim 1 of both the 1st and the 2nd auxiliary requests contravenes Article 123(2) EPC and are not allowable.

4.2 Consequently, the 1st and 2nd auxiliary requests as a whole must be refused.

4.3 Under these circumstances it is not necessary to investigate as to whether or not the claims of the 1st and 2nd auxiliary requests contain further deficiencies.

## Order

## For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

E. Görgmaier R. Young