Datasheet for the decision of 5 December 2006

Case Number: T 0577/05 - 3.2.06
Application Number: 96944256.5
Publication Number: 0868555
IPC: D04H 13/00
Language of the proceedings: EN
Title of invention: Nonwoven laminates with improved peel strength
Patentee: KIMBERLY-CLARK WORLDWIDE, INC.
Opponents: The Procter & Gamble Company
Paul Hartmann Aktiengesellschaft
SCA Hygiene Products AB
Headword: -

Relevant legal provisions: EPC Art. 123(2),(3), 84 EPC R. 57a

Keyword: "Main Request: Amendments - deletion of feature"
"Main Request "B" and 1st Auxiliary Request: not admitted into the proceedings"

Decisions cited: -

Catchword: -
DECISION
of the Technical Board of Appeal 3.2.06
of 5 December 2006

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Decision under appeal:  
Decision of the Opposition Division of the European Patent Office posted 1 March 2005 revoking European patent No. 0868555 pursuant to Article 102(1) EPC.

Composition of the Board:  
Chairman: P. Alting Van Geusau  
Members: G. L. De Crignis  
R. Menapace
Summary of Facts and Submissions

I. European Patent No. 0868 555, granted on application No. 96 944 256.5, was revoked by decision of the opposition division posted on 1 March 2005. The revocation was based on the finding that the subject-matter of claim 1 of the Main Request, as well as that of the 1st and the 2nd Auxiliary Request was not novel over the disclosure in D1 WO-A-97/09173.

The subject-matter of claims 6 and 7 of the third Auxiliary Request was not considered to meet the requirements of Article 123(2) EPC consequently the third Auxiliary Request was not allowed.

II. The Appellant (patent proprietor) filed a notice of appeal against this decision on 3 May 2005, and paid the appeal fee simultaneously. On 30 June 2005 the statement of grounds of appeal was filed, accompanied by new sets of claims in accordance with a Main request and 1st to 3rd Auxiliary Requests.

III. With a communication dated 27 July 2006, accompanying the summons to oral proceedings, the Board indicated that in none of these requests the subject-matter of claim 1 appeared to meet the requirements set out in Article 54(3) EPC.

IV. With letter dated 3 November 2006 the Appellant filed a new Main and Auxiliary Request.
V. Oral proceedings were held on 5 December 2006. In his introductory statement the Chairman informed the parties, that the Board was of the preliminary opinion that in view of the subject-matter of claim 1 of the Main Request and of 1st Auxiliary Request, both filed with letter of 3 November 2006, problems were considered to be present with regard to Article 123 EPC firstly concerning the feature referring to the peel strength which was deleted with regard to claim 1 as originally filed and secondly concerning the subject-matter of dependent claim 3 having been an alternative to the features now added to the subject-matter of claim 1.

After discussion of these and further formal issues and a break, the Appellant filed a new Main Request. After discussion on the formal allowability of this request, and the finding by the Board, that claim 1 of this request did not comply with the requirements of Article 123 EPC, the Appellant filed a new Main request "B". In order to overcome the objections with regard to Article 123 EPC, the Appellant had split the subject-matter of independent claim 1 into five independent claims, corresponding to the subject-matter of originally filed claims 12 to 16. Furthermore, the Appellant filed a 1st Auxiliary Request, which comprised in each independent claim an additional feature referring to the peel strength.

VI. The Appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the "Main Request", "Main Request "B"" or "1st Auxiliary Request", all of them filed during the oral proceedings.
Respondents I to III requested that the appeal be dismissed.

VII. Claim 1 according to the Appellant's Main Request reads as follows:

"A product selected from the group consisting of personal care articles, infection control products, protective cover articles, garments having as a component a laminate comprising a first thermoplastic polymer film thermally bonded to a second thermoplastic polymer nonwoven layer and outdoor fabrics comprising said laminate characterised in that the second layer comprises sheath/core bicomponent fibers or filaments wherein the density of the core component exceeds the density of the sheath component by at least 0.02 g/cm³, and said first thermoplastic polymer film comprises a polymer compatible with said sheath component, wherein said first film comprises a polyolefin and said bicomponent fibers or filaments have a sheath selected from the group consisting of polyolefins and a core selected from the group consisting of polyolefins, polyamides, and polyesters, wherein said first film comprises a heterophase polyolefin composition, and wherein said sheath also comprises a heterophase polyolefin composition."

Main Request "B" differs from the Main Request in that five independent claims are included which individually referred to the "personal care article", "infection control product", "protective cover article", "garment" and to the "outdoor fabrics". Furthermore, in each
independent claim the density difference is said to be "at least 0.04 g/cm³".

According to the 1st Auxiliary Request, independent claims 1 to 5 differ from claims 1 to 5 according to the Main Request "B" in that it is added at the end of all claims "and wherein the peel strength of the laminate exceeds 125% of that obtained under the same bonding conditions using a nonwoven wherein said density difference does not exist as said second nonwoven layer".

VIII. At the end of the oral proceedings the Chairman announced that Main Request "B" and the 1st Auxiliary Request were not admitted into the proceedings and gave the decision, that the appeal was dismissed.

IX. The Appellant essentially argued as follows:

With respect to the Main Request, the term "product" should be considered as being equivalent to the term "article" and all subject-matter referred to in originally filed claims 12 to 16 referred to such articles or products. The fact that the products or articles of originally filed claims 12 to 16 referred to the laminate of originally filed claim 1 and did not include a reference to the further dependent claims was occasioned by US-patent law and it was usual practice and well-known that all further combinations of other claims with claim 1 were embraced as well.

With respect to originally filed claim 1 wherein the feature referring to the higher density of the core component exceeding the density of the sheath component
was specified in addition to the feature referring to the peel strength exceeding 125 % of that obtained under similar bonding conditions without such an arrangement, the examples provided sufficient evidence for the fact that these features were entirely interdependent. Hence, it was redundant to add the peel strength feature to the subject-matter of claim 1 as it was already implicitly present via the density feature. Furthermore, the wording concerning the peel strength in claim 1 as originally filed had been considered to lack clarity and accordingly, had been deleted. Hence, in order to avoid clarity objections the peel strength feature should not be re-inserted.

The term "heterophasic polyolefin composition" was disclosed in claims 8 to 11 as originally filed and in granted claims 8 and 9, thus neither an objection under Article 123(2) EPC nor under Article 84 EPC could be raised. Furthermore, such compositions were well-known by the skilled person.

In Main Request "B", one independent claim was present for each distinct article or product, based on originally filed claims 12 to 16. Specifying in all these claims that the density difference had to be "at least 0.04 g/cm³" was consistent with the preferred embodiment disclosed on page 9, line 31 of the original application and implicitly covered the peel strength feature.

The 1st Auxiliary Request should be admitted into the proceedings, in that it was filed in direct response to the objections put forward for the claims of the Main Request and of Main Request "B" and hence, it was
admissible. Due to the peel strength feature added to the wording of the claims and its clarification by limiting the "similar" bonding conditions to the "same" bonding conditions, the added feature was clear as the skilled person knew which bonding conditions had to be applied and thus the requirements of Article 123 EPC were met.

The Respondents argued essentially as follows:

With respect to the Main Request, claim 1 referred to a variety of "products". In the originally filed application, products with the claimed combination of features had neither been the subject-matter of any claim nor were disclosed in the description. Therefore, the subject-matter of claim 1 contained subject-matter which extended beyond the content of the application as filed (Article 123(2) EPC). Claim 1 now also comprised a "product selected from the group consisting of" products and articles which had not been in the scope of the granted claims and therefore, the protection conferred was extended (Article 123(3) EPC).

In the application as originally filed, in claim 1 as well as in the description, see page 2, lines 18 - 23, it was set out that in addition to the density requirements, the peel strength was an important feature of the invention. Therefore, the deletion of the latter feature contravened the requirements of Article 123(2) EPC.

The term "heterophase" as an adjective to "polyolefin compositions" could also be understood as referring to copolymers, mixtures of polymers and was not clear
itself (Article 84 EPC). The reference on page 2, line 30/31 to a film including heterophasic olefin polymer compositions of the type available under the designation Catalloy™ could be considered sufficiently clear, however, this composition concerned exclusively the film and not the sheath of the nonwoven. One even more specific reference to a Catalloy™ heterophasic olefin polymer composition designated Catalloy X11395-5-1 was present in the application with respect to a blown film on page 11, lines 19 - 21 in combination with the laminates of the examples. However, such X-numbered Catalloy™ types referred to experimental products and not to commercially available products.

Moreover, none of the examples supported the claims, mainly in view of the fact that the sheath components in the examples were not based on a heterophasic polyolefin composition. Thus no clear and complete teaching was present and sufficient information on the subject-matter for which protection was sought was not available. Therefore, the request did not meet the requirements of Article 83 EPC.

Main Request "B" should not be admitted into the proceedings. The feature referring to the peel strength was still missing in all the independent claims and the combination of features was present neither in the application as originally filed (Article 123(2) EPC) nor in the scope of the granted claims (Article 123(3) EPC) as already argued in respect of the Main Request. The further objections raised against the Main Request were equally applicable.
The 1st Auxiliary Request should also not be admitted into the proceedings. The subject-matter of its claims 1 to 5 included a feature with respect to the peel strength which was neither disclosed (Article 123(2) EPC) nor clear (Article 84 EPC). The objections under Article 123(3) EPC made to the Main Request and Main Request "B" also applied. With regard to the added feature, the skilled person had no instruction as to the bonding conditions (Article 83 EPC). The alleged clarity by the "same" bonding conditions was not present since it was not clear what was meant therewith. With respect to the bonding conditions, there was a reference on page 9, lines 6 to 12 of the original application to the bonding window of the "most common polymer combinations". However, even for those polymer combinations a series of peel tests was necessary in order to establish the bonding window. With respect to the claimed heterophasitic polyolefin compositions, it was not clear whether they would fall under this term and therefore, whether the bonding window could be established at all.

Reasons for the Decision

1. The appeal is admissible.

2. Main Request

2.1 Claim 1 according to the Main Request includes the subject-matter of granted claims 1, 4, 8 to 14 corresponding to originally filed claims 1, 4, 8, 11 to 16, with the exception of the feature referring to the peel strength in originally filed claim 1 which reads: "and wherein the peel strength of said laminate
exceeds about 125 % of that obtained under similar thermally bonding conditions using a nonwoven wherein said density difference does not exist as said second nonwoven layer" and with the addition of a specific lower limit ("at least 0.02 g/cm³") for the feature referring to the density difference of the sheath/core bicomponent fibers based on page 9, 1. 30 to 32 of the application as filed.

2.2 The deletion of the peel strength feature amends claim 1 in a way that the subject-matter extends beyond the content of the application as filed (Article 123(2) EPC).

The patent in suit aims to provide nonwoven laminates with improved peel strength (title). Hence, the peel strength requirement represents a crucial requirement of the invention. This is reflected in claim 1 and in the description as originally filed:

- Claim 1 as originally filed refers to a "laminate ... comprising sheath/core bicomponent fibers or filaments wherein the density of the core component exceeds the density of the sheath component .... and wherein the peel strength of said laminate exceeds about 125 % of that obtained under similar thermally bonding conditions ...". [Emphasis added]

- The summary of the invention on page 2, lines 18 - 23 as originally filed also refers to "a laminate wherein at least one layer includes sheath/core bicomponent fibers or filaments with a higher density core component than sheath component and wherein the laminate peel strength is at least 125 % of that
obtained under similar bonding conditions ...".

[Emphasis added]

Therefore, the peel strength feature is a feature in addition to the density requirement and cannot be considered as representing a substitute or alternative thereto.

2.3 The argument of the Applicant that Table 1 of the patent in suit provided evidence for the peel strength being directly interrelated with the density requirement set out in the claim is not convincing. Table 1 does not contain any example in which the sheath comprises a heterophasic polyolefin composition. Instead, it only discloses sheaths made of either polypropylene (PD3445 from Exxon, samples E#1, 3 and 4) or linear low density polyethylene (6811A from Dow, sample E#2). Therefore, none of the examples provides support for claim 1 which refers to heterophasic polyolefin compositions for the film and for the sheath. Thus, no clear and unambiguous teaching is available that the additional feature concerning the peel strength is dependent on the claimed density difference. Therefore, the requirements of Article 123(2) EPC are not complied with.

2.4 The same conclusion is to be drawn with regard to the requirements of Article 123(2) EPC and the now claimed combination of features with respect to the products and articles. Products or articles referring to heterophasic polyolefin composition for the film and the sheath have not been disclosed in the originally filed application:
The subject-matter of claims 12 to 16 as originally filed referred to articles or products (claim 12 to the personal care article, claim 13 to an infection control product, claim 14 to a protective cover article, claim 15 to a garment and claim 16 to an outdoor fabric) having as a component the laminate of originally filed claim 1. Originally filed claim 1 does not refer to the specific combination of film and sheath comprising a heterophasic polyolefin composition. Only claim 11 as originally filed (being dependent on claim 8) combined the feature referring to a film comprising a heterophasic polyolefin composition with the feature referring to a sheath comprising a heterophasic polyolefin composition. Hence, there is no support for such personal care article, infection control product, protective cover article, garment or outdoor fabric having as a component a laminate comprising a film and a sheath comprising a heterophasic polyolefin composition and the requirement of Article 123(2) is not complied with.

The argument of the appellant that it represented common practice in the United States patent system to file such independent claims and to recognize that all further specific features referred to in other dependent claims should be considered as included as well is not relevant, since European patents can only be considered in view of their compliance with the EPC. According to Article 123(2) EPC, a European patent application or a European patent may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed. The specific combination of features referred to in claim 11 as originally filed is not the laminate
referred to in claim 1 as originally filed. Originally filed claim 1 refers to thermoplastic polymer film thermally bonded to a thermoplastic polymer nonwoven layer comprising sheath/core bicomponent fibers. The products and articles referred to in originally filed claims 12 to 16 therefore do not comprise the specific combination of features referred to in originally filed claim 11 (heterophase polyolefin composition for film and sheath) but only the combination disclosed in claim 1. Hence, also for this reason, this request cannot be allowed in view of Article 123(2) EPC and it is not necessary to discuss other objections raised.

3. **Main Request "B"**

The subject-matter of independent claims 1 to 5 of Main Request "B" does not contain the feature concerning the peel strength. As set out with respect to the Main Request under point 2.2 above, the deletion of this feature amended claim 1 in a way that the subject-matter extends beyond the content of the application as filed (Article 123(2) EPC). At least for this reason, this late filed request was not clearly allowable and, in accordance with the Case Law of the Boards of Appeal (see 4th edition, VII D 14.2.1), it was not admitted into the proceedings.

4. **1st Auxiliary Request**

The subject-matter of claims 1 to 5 of 1st Auxiliary Request differs from the subject-matter of claims 1 to 5 of Main Request "B" in that a feature referring to the peel strength has been added. The respective feature in originally filed claim 1 has been modified
in that "similar" was replaced by "same". Such an amendment has neither a basis in the application as originally filed (Article 123(2) EPC) nor is it appropriate to overcome the clarity objection (Article 84 EPC). As indicated by the respondents, no clear definition of the "same bonding conditions" is given in the specification and it is not clear whether the definition of the bonding window which is present on page 9, lines 6 to 12 applies for the heterophase polyolefin compositions at all. This request thus not being clearly allowable, it was not admitted into the proceedings.

5. In conclusion, the Appellant's Main Request not being in consistency with the requirements of Article 123 EPC, its Main Request "B" as well as the 1st Auxiliary Request not being admitted into the proceedings, the appeal is not successful.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

C. Eickhoff P. Alting van Geusau