Datasheet for the decision
of 11 December 2014

Case Number: T 1272/12 - 3.3.09
Application Number: 08019702.3
Publication Number: 2062955
IPC: C09J133/00
Language of the proceedings: EN

Title of invention:
Aqueous pressure-sensitive adhesive composition and utilisation thereof

Patent Proprietor:
Nitto Denko Corporation

Opponent:
BASF SE

Headword:

Relevant legal provisions:
EPC Art. 54, 56, 84, 111(1), 123(2), 113(1), 99(1), 114(1), 114(2)

Keyword:
Late-filed document: admitted (yes)
Remittal after admittance of late-filed document (no)
Main request, auxiliary requests 1-3, 13: novelty (no)
Auxiliary request 26: novelty (yes), inventive step (no)
Auxiliary request 7: disclosure of amended claim (yes), clarity (yes), novelty (yes), inventive step (yes)
Decisions cited:
G 0001/84, G 0001/03, T 0156/84, T 1002/92, T 2542/10

Catchword:
DECISION
of Technical Board of Appeal 3.3.09
of 11 December 2014

Appellant: 
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Decision under appeal: 
Interlocutory decision of the Opposition 
Division of the European Patent Office posted on 
5 April 2012 maintaining European patent No. 
2062955 in amended form.

Composition of the Board:
Chairman 
W. Sieber
Members: 
N. Perakis 
F. Blumer
Summary of Facts and Submissions

I. Mention of the grant of European patent No. 2 062 955 in the name of Nitto Denko Corporation was published on 9 June 2010 (Bulletin 2010/23). The patent was granted with five claims. Claim 1 reads as follows:

"1. An aqueous pressure-sensitive adhesive composition primarily comprising an acrylic polymer dispersed in water, wherein:
the acrylic polymer is obtained by polymerizing a starting monomer material containing an alkyl(meth)acrylate as a main monomer, the alkyl(meth)acrylate content of the starting monomer material being 80 mass% or more;
and
the starting monomer material contains acrylic acid and methacrylic acid."

II. A notice of opposition was filed by BASF SE requesting revocation of the patent in its entirety on the grounds that the granted subject-matter was neither novel nor inventive (Article 100(a) EPC).

The documents filed during the proceedings before the opposition division included the following:

D3: JP 2006-265537 A (machine translation); and


III. By an interlocutory decision announced orally on 23 February 2012 and issued in writing on 5 April 2012 the opposition division maintained the patent in amended form (claims 1-4 of the main request filed during the oral proceedings of 23 February 2012).
Claim 1 of the **main request** reads as follows:

"1. An aqueous pressure-sensitive adhesive composition primarily comprising an acrylic polymer dispersed in water, wherein:

the acrylic polymer is obtained by polymerizing a starting monomer material containing an alkyl(meth)acrylate as a main monomer, the alkyl(meth)acrylate content of the starting monomer material being 80 mass% or more; and

the starting monomer material contains acrylic acid and methacrylic acid; and

wherein the aqueous pressure-sensitive composition further comprises 5 to 40 parts by mass of a tackifier to 100 parts by mass of the acrylic polymer; and

wherein the tackifier is selected from rosin-based resins, rosin derivative resins and terpene-based resins."

The opposition division considered that the subject-matter of claim 1 of the main request satisfied the requirements of Articles 123(2) and (3) and 84 EPC, was novel in view of the disclosure of D7, and involved an inventive step in view of the disclosure of D7 either alone or in combination with D3.

**IV.** On 31 May 2012 the opponent (in the following: the appellant) filed an appeal against the interlocutory decision of the opposition division. The appeal fee was paid on 1 June 2012. On 3 July 2012 the appellant filed the statement setting out the grounds of appeal,
reiterating the objections under Articles 123(2), 84, and 56 EPC raised before the opposition division.

V. By letter of 22 November 2012, the patent proprietor (in the following: the respondent) filed observations on the appeal, additional experimental data (Enclosures A to C) and a list of documents (Enclosure "Resin") in support of its arguments. The respondent requested that the appeal be dismissed (main request) or that the patent be maintained on the basis of the claims of one of auxiliary requests 1-12 also filed with the letter of 22 November 2012. Only auxiliary requests 1 to 3 and 7 are relevant for this decision.

Claim 1 of auxiliary request 1 corresponds to claim 1 of the main request (i.e. claim 1 as found allowable by the opposition division, see point III above) with the following additional features regarding the tackifier:

"wherein the tackifier is selected from rosin based resins, rosin derivative resins and terpene based resins, wherein the rosin based resins are selected from gum rosin, wood rosin, tall-oil rosin, stabilized rosins, polymerized rosins and unsaturated acid modified rosins, the rosin derivative resins are selected from esterified compounds of the above mentioned rosin based resins and phenol modified compounds of the rosin based resins mentioned above, and the terpene based resins are selected from alpha pinene resins, beta-pinene resins, aromatic modified terpene based resins and terpenephenol based resins".

Claim 1 of auxiliary request 2 corresponds to claim 1 of auxiliary request 1 with the following additional features regarding the acrylate starting monomer:
"the alkyl (meth)acrylate content of the starting monomer material being 80-99.8 mass% and of the total amount of the alkyl(meth)acrylate contained in the starting monomer material (meth)acrylic ester of a C₄-C₈-alkyl alcohol amounts to 70 mass% or greater".

Claim 1 of auxiliary request 3 corresponds to claim 1 of auxiliary request 2 with the following additional feature regarding the ratio of the further starting monomers acrylic acid and methacrylic acid:

"wherein the starting monomer material contains acrylic acid and methacrylic acid at a ratio (AA:MAA) between 1:10 and 10:1".

Claim 1 of auxiliary request 7 was revised during the appeal proceedings (see section XII below).

VI. On 25 February 2014 the board summoned the parties to oral proceedings scheduled to take place on 18 July 2014.

VII. By letter of 3 April 2014, the appellant filed the following new document:

D8: US 5 221 706 A,

and requested that it be admitted into the proceedings because it was relevant for the novelty of the subject-matter of claim 1 of the main request and auxiliary requests 1-3 and for the inventive step of the subject-matter of claim 1 of auxiliary requests 4-12.

VIII. By letter of 30 May 2014, the respondent requested that D8 not be admitted into the proceedings. The respondent also requested that if the board was minded to discuss
the admissibility of D8 during the oral proceedings, the oral proceedings should be postponed to give the respondent the opportunity to study this document, to consider its relevance and, if required, to consider further arguments, claim amendments, as well as evidence to be submitted in reply to that document.

IX. In a communication dated 11 June 2014 the board expressed its preliminary non-binding opinion regarding D8 and rescheduled the oral proceedings for 11 December 2014.

X. By letter of 11 August 2014, the respondent requested that the case be remitted to the opposition division should the board be inclined to admit D8 into the proceedings, in order to ensure that the respondent had the same or at least corresponding procedural rights in the proceedings. The respondent submitted additional claim sets (auxiliary requests 13 to 38). Only auxiliary request 13 and 26 are relevant for this decision.

Claim 1 of auxiliary request 13 corresponds to claim 1 of the main request with the additional feature:

"and wherein the starting monomer material contains butyl acrylate (BA) and 2-ethylhexyl acrylate (EHA) as the alkyl(meth)acrylates with a content ratio of BA to EHA of 0/100 to 70/30".

Claim 1 of auxiliary request 26 corresponds to claim 1 of the main request with the additional feature:

"and wherein the starting monomer material contains butyl acrylate (BA) and 2-ethylhexyl acrylate (EHA) as
the alkyl(meth)acrylates with a content ratio of BA to EHA of 5/95 to 60/40”.

XI. By letter of 24 September 2014, the appellant filed arguments against the patentability of the subject-matter of auxiliary requests 13 to 38.

XII. On 11 December 2014 oral proceedings were held before the board. During the oral proceedings the respondent specified the order of the requests to be discussed as follows: main request, auxiliary request 1, auxiliary request 2, auxiliary request 3, auxiliary request 13, auxiliary request 26, revised auxiliary request 7 filed during the oral proceedings, and the remaining requests in their numerical order.

Claim 1 of revised auxiliary request 7 reads as follows:

"1. Use of a double-sided pressure-sensitive adhesive sheet for bonding a foam member to an adherend, the pressure-sensitive adhesive sheet comprising adhesive layers of an aqueous pressure-sensitive adhesive composition primarily comprising an acrylic polymer dispersed in water, wherein:

the acrylic polymer is obtained by polymerizing a starting monomer material containing an alkyl(meth)acrylate as a main monomer, the alkyl(meth)acrylate content of the starting monomer material being 80 mass% or more; and

the starting monomer material contains acrylic acid and methacrylic acid; and

wherein the aqueous pressure-sensitive adhesive composition further comprises 5 to 40 parts by mass of a tackifier to 100 parts by mass of the acrylic polymer; and
wherein the tackifier is selected from rosin-based resins, rosin derivative resins and terpene-based resins."

XIII. The relevant arguments put forward by the appellant in its written submissions and during the oral proceedings may be summarised as follows:

- D8 had been found accidentally at a late stage of the proceedings. Despite its late-filing D8 should be admitted into the proceedings in view of its relevance. The admittance of late-filed documents on the basis of their relevance guaranteed that only valid patents were maintained by the EPO.

- Furthermore, the case should not be remitted to the opposition division. The respondent had had sufficient time to react to the disclosure of D8 and had taken the opportunity to do so, as demonstrated by the filing of an extremely large number of additional auxiliary requests (auxiliary requests 13 to 38).

- Claim 1 of the main request as well as of auxiliary requests 1-3, 13, 26 and 7 infringed the requirements of Article 123(2) EPC as the respective subject-matter was not disclosed in the application as filed. Although the features relating to the type of tackifier, the tackifier amount in the PSA composition and the amount of the alkyl(meth)acrylate in the starting monomer material were disclosed individually in the application as filed, their combination was not.

- The subject-matter of claim 1 of the main request and auxiliary requests 13, 26 and 7 also did not
fulfil the requirements of Article 84 EPC. The terms "rosin-based resins", "rosin derivative resins" and "terpene-based resins" were not defined in the patent in suit and the skilled person did not know what they meant, in particular because no distinction could be made between them.

- The subject-matter of claim 1 of the main request lacked novelty in view of D8 (see examples). The subject-matter of claim 1 of auxiliary requests 1-3 likewise lacked novelty in view of D8, since the examples disclosed the additional features of respective claim 1 of these requests. The subject-matter of claim 1 of auxiliary request 13 lacked novelty in view of D8, as claim 2 disclosed that the starting monomer material contained EHA 100 mass%.

- Claim 1 of auxiliary request 26 lacked inventive step in view of D8 considered alone. Contrary to the argument of the respondent, D8 should be considered as the closest prior art because it belonged to the same technical field as the patent in suit, namely that of PSA compositions, and had the most structural features in common. D8 did not disclose the specific ratio of BA:EHA. However, this ratio was an arbitrary selection that was within the capabilities of the skilled person carrying out his ordinary tasks.

- Even if D7 was considered as the closest prior art, the subject-matter of claim 1 did not involve an inventive step in view of the obvious combination of D7 with D3.
- Claim 1 of auxiliary request 7 lacked an inventive step in view of the obvious combination of D7 with D3. In this case, D7 (example 1) should be considered as the closest prior art since it related to the use of a PSA sheet for bonding a foam member to an adherend. D7 disclosed only AA as additional starting monomer material for the manufacture of the acrylic polymer of the PSA sheet. However, the use of both AA and MAA in order to improve adhesion was obvious in view of D3 (see paragraph [0039]).

- Claim 1 of auxiliary request 7 lacked inventive step even if D8 was considered as the closest prior art. The reason is that the claimed use was obvious in view of D7.

XIV. The relevant arguments put forward by the respondent in its written submissions and during the oral proceedings may be summarised as follows:

- Document D8 had been filed too late, namely after the summons to oral proceedings, and should not be admitted into the proceedings. Furthermore, relevance should not be the criterion for admitting late-filed documents since it gave the appellant control over the proceedings, which was contrary to the principle of fair proceedings. Furthermore, admittance of late-filed documents should be subject to the same evaluation criteria as late-filed arguments and late-filed experiments, for which the boards of appeal of the EPO followed a much stricter approach.
If document D8 was admitted into the proceedings, the factual framework would change and the case should be remitted to the opposition division.

Claim 1 of all requests satisfied the requirements of Article 123(2) EPC. The tackifier and its amount were disclosed in claim 4 as filed, the type of tackifier in paragraph [0052] as filed, the amount of the alkyl (meth)acrylate monomer material in paragraph [0017] as filed and the ratio of BA:EHA in paragraph [0019] as filed. All these disclosures were general and their combination did not lead to the singling out of specific undisclosed subject-matter.

Claim 1 of all requests also satisfied the requirements of Article 84 EPC. The terms objected to by the appellant had a clear meaning for the average skilled person. Furthermore, the patent in suit provided a list of compounds falling under each of these terms (see paragraph [0052] and the examples). Lastly, the appellant had not submitted any evidence in support of its allegations.

If D8 was admitted into the proceedings, the subject-matter of claim 1 of the main request and auxiliary requests 1-3 would lack novelty.

The subject-matter of claim 1 of auxiliary request 13 was novel. D8 (examples) did not disclose the claimed ratio BA:EHA of 0/100 to 70/30.

The subject-matter of claim 1 of auxiliary request 26 was novel because D8 did not disclose the more specific ratio BA:EHA of 5/95 to 60/40.
Furthermore it involved an inventive step as it was not obvious in view of the cited prior art. Contrary to the allegations of the appellant, D7 and not D8 was the closest prior art. Only D7 dealt with the same technical problem, namely the bonding of a foam member to an adherend when the aqueous PSA composition of claim 1 was used as PSA sheet substrate for the foam. However, D7 did not disclose the specific ratio of BA:EHA and the admixture of AA and MAA. D7 disclosed PSA compositions containing a different BA:EHA ratio and only AA (example 1). The improvement of the claimed PSA composition using the admixture of AA and MAA was illustrated in enclosure C, in which example 1 of D7 was repeated and showed worse results for the "foam repulsion resistance" compared with the examples of the patent. The skilled person aiming at improving the foam repulsion resistance of the PSA composition of D7 would not find in D7 or any other document any hint towards the claimed PSA composition. D3 did disclose a PSA composition comprising AA and MAA but in the context of solving a different problem, namely the improvement of removability of PSA sheets (paragraphs [0014] and [0039]). Therefore the appellant’s assertions based on the combination of D7 with D3 were based on an ex-post facto analysis.

The subject-matter of claim 1 of auxiliary request 7 was novel and involved an inventive step. As put forward in the context of claim 1 of auxiliary request 26, D7 was the closest prior art, not D8. Furthermore, for the reasons given above the skilled person would not combine D7 with
D3 since the latter dealt with another technical problem.

XV. The appellant requested that the decision of the opposition division be set aside and the patent be revoked in its entirety.

XVI. The respondent requested that the appeal be dismissed, or that the patent be maintained on the basis of the claims of one of auxiliary requests 1-3, 13, 26, 7, 4-6, 8-12, 14-25 and 27-38, auxiliary requests 1-6 and 8-12 as filed with letter of 22 November 2012, auxiliary requests 13-38 as filed with letter of 11 August 2014, and auxiliary request 7 as filed during the oral proceedings before the board.

Reasons for the Decision

1. The appeal is admissible.

2. Admissibility of document D8

2.1 The respondent argued that D8 should not be admitted into the proceedings because it had been submitted after issuance of summons to attend oral proceedings and only shortly before the scheduled oral proceedings.

2.1.1 According to the respondent, D8 had not been included in the initial opposition, had not been submitted in the course of the proceedings before the opposition division and, furthermore, had not been submitted with the statement of grounds of the appeal. Therefore its late filing violated fundamental procedural requirements for fair proceedings before the EPO.
2.1.2 Admitting D8 into the proceedings would confirm that the appellant had total control over the proceedings, in particular with regard to when relevant prior art was submitted. Thus the appellant could abuse and manipulate the proceedings before the EPO as it wished, steering their course solely in the light of its own assessments and intentions.

2.1.3 Furthermore, it was not correct to apply solely the criterion of relevance when assessing the admittance of D8 into the proceedings. Focusing exclusively on the criterion of relevancy unfairly burdens the respondent/patentee since it could never be sure it had received the full body of prior art from an appellant/opponent.

When assessing admittance of a late-filed document during appeal proceedings, the boards of appeal should apply the same criteria as those developed for new arguments, new experimental evidence and new grounds of opposition. With regard to any of these issues, the approach by the boards of appeal was characterised by a greater wish to ensure fair proceedings and to protect parties from surprising deviations from previous submissions, in particular at a late stage of the proceedings.

Thus, it was not appropriate in the present case to rely simply on the criterion of relevance since this would be a breach of the general principles requiring fair proceedings for all parties concerned.

2.2 The board acknowledges that D8 was submitted by the appellant outside the nine-month period set by Article 99(1) EPC and at a very late stage, namely only with its letter of 3 April 2014.
However, according to Article 114 EPC the board has discretion over whether or not to admit a late-filed document. Article 114(1) EPC rules:

"In proceedings before it, the European Patent Office shall examine the facts of its own motion; it shall not be restricted in this examination to the facts, evidence and arguments provided by the parties and the relief sought",

whereas Article 114(2) EPC rules:

"The European Patent Office may disregard facts or evidence which are not submitted in due time by the parties concerned".

2.3 In the exercise of its discretion the board took into consideration the criterion set out in decision G 1/84 (OJ EPO 1985, 299, point 3, first sentence) according to which:

"...the elaborate provisions in the EPC for substantive examination and opposition are designed to ensure that only valid European patents should be granted and maintained in force, so far as it lies within the power of the EPO to achieve this" (emphasis by the board).

This was confirmed by T 156/84 (OJ EPO 1988, 372, headnote) which stated:

"The principle of examination by the EPO of its own motion (Article 114(1) EPC) takes precedence over the possibility of disregarding facts or evidence not submitted in due time. This follows from the EPO's duty
vis-à-vis the public not to grant or maintain patents which it is convinced are not legally valid."

Thus D8, which was filed late in the appeal proceedings, may be admitted in so far as it is prima facie prejudicial to the maintenance of the patent (see also T 1002/92, OJ EPO 1995, 605; and T 2542/10 of 9 October 2012).

In the present case, the respondent did not dispute that D8 was novelty-destroying for claim 1 of the main request.

2.4 Furthermore, there is no evidence that the behaviour of the appellant has been unfair or abusive. The board thus accepts the explanations of the appellant that:
   
   a) D8 had been found accidentally during the evaluation of patent search results in a completely different area,

   b) D8 had not been easy to detect since neither the appellant's own patent search nor the search carried out by the European, US, Japanese or Chinese offices for the patent application corresponding to the patent in suit had found D8,

   c) D8 had been wrongly classified [C09K 5/41 (optical brightening agents, organic pigments) instead of C09J], a possible reason for this mishap.

Thus, the late filing of D8 did not appear to be the wilful intention of the appellant to steer the proceedings according to its own strategy, and this late-filing did not violate the fundamental right of the respondent to fair proceedings.

2.5 In view of the undisputed relevance of D8 and of the fact that the respondent was given sufficient time to
consider D8 and to prepare for a proper defence, D8 was admitted into the proceedings.

3. Non-remittal of the case to the opposition division

The respondent requested that the case be remitted to the opposition division in order to ensure that the patentee had the same or at least corresponding procedural rights in the proceedings, namely to defend its patent with the full knowledge of all attacks and prior-art references before two instances.

However, there is no absolute right to remittal upon request. What Article 111(1) EPC stipulates is that the board has the discretion to either exercise any power within the competence of the department which was responsible for the decision under appeal, in the present case the opposition division, or to remit the case to that department for further prosecution.

Under the circumstances of the present case, namely the filing of D8 by the appellant with letter of 3 April 2014, the postponement of the oral proceedings by the board until the 11 December 2014 and the filing by the respondent of new auxiliary requests in the light of the disclosure of D8, the board decided that remittal of the case to the opposition division was not appropriate.

4. The requests of the respondent

In the following, the patentability of the respondent's requests is assessed in the order defined by it during the oral proceeding, namely the main request, auxiliary request 1, auxiliary request 2, auxiliary request 3,
auxiliary request 13, auxiliary request 26 and auxiliary request 7.

5. Main request

The appellant disputed the novelty of claim 1 of the main request in view of the disclosure of D8. The aqueous pressure-sensitive (PSA) compositions disclosed in the examples of D8 comprise:

- an acrylic polymer dispersed in water containing 97% by weight butyl acrylate, 1.2% by weight acrylic acid and 1.8% by weight methacrylic acid (column 4, lines 57-61);
  [Thus D8 discloses the acrylic polymer composition of claim 1 which requires a starting monomer material containing 80 mass% or more of an alkyl(meth)acrylate, acrylic acid and methacrylic acid]

- a tackifier which is a stabilised rosin ester, namely Hercules TACOLYN 64 (example 2), or a glycerol ester of highly hydrogenated rosin, namely Hercules FLORAL 85-55 (example 3), or an emulsified esterified rosin, namely PERMATAC E607 (example 4), or a 50-50 blend of an aqueous dispersion of a low softening point rosin ester, namely Arizona AQUATAC 6025, and an aqueous dispersion of a glycerol ester of rosin, namely Arizona AQUATAC 6085 (example 5), or a mixture of gum rosin esters SNOWTACK SE 325A and 380A (example 6), or SNOWTACK 301A (examples 8-11), or PERMATEC E-607 (examples 16-19), or an aqueous dispersion of a glycerol ester of rosin, namely AQUATAC 6085 (examples 20-23);
  [Thus D8 discloses the tackifier of claim 1 which
is selected from rosin-based resins, rosin derivative resins and terpene-based resins]

- the tackifier in amounts of 33% by weight (examples 1-6) or amounts varying between 5.4 - 40.1% by weight (examples 8-10, 17, 18 and 20-22).
[Thus D8 discloses that the PSA composition comprises 5 and 40 parts by weight of a tackifier to 100 parts by mass of the acrylic polymer]

Therefore D8 discloses the subject-matter of claim 1 of the main request, so that the main request 1 is not allowable.

6. Auxiliary request 1

Compared with claim 1 of the main request, claim 1 of auxiliary request 1 additionally requires that the rosin-based resins, rosin derivative resins and terpene-based resins are selected from a list of specific rosin resins.

Such specific resins are however used in the various cited examples of D8.

Consequently claim 1 of auxiliary request 1 lacks novelty over D8, and therefore auxiliary request 1 is not allowable.

7. Auxiliary request 2

Compared with claim 1 of auxiliary request 1, claim 1 of auxiliary request 2 additionally requires that the alkyl(meth)acrylate content of the starting monomer material is 80 to 99.8 mass% and the total amount of
the alkyl(meth)acrylate contained in the starting monomer material (meth)acrylic ester of a C4-C8-alkyl alcohol amounts to 70 mass% or greater.

All cited examples of D8 use 97% by weight of butyl acrylate in the starting monomer material composition, i.e. an acrylic ester of a C₄ alkyl alcohol (column 4, line 59).

Therefore the subject-matter of claim 1 of auxiliary request 2 lacks novelty over D8, and therefore auxiliary request 2 is not allowable.

8. Auxiliary request 3

Compared with claim 1 of auxiliary request 2, claim 1 of auxiliary request 3 additionally requires that the starting monomeric material contains acrylic acid and methacrylic acid at a ratio (AA:MAA) between 1:10 and 10:1.

All cited examples of D8 use AA:MAA ratio of 1:1,5 (column 4, lines 59-60).

This means that the subject-matter of claim 1 of auxiliary request 3 lacks novelty over D8, and therefore auxiliary request 3 is not allowable.

9. Auxiliary request 13

Compared with claim 1 of the main request, claim 1 of auxiliary request 13 additionally requires that the starting monomer material contains butyl acrylate (BA) and 2-ethylhexyl acrylate (EHA) as the alkyl(meth)acrylates with a content ratio of BA to EHA of 0/100 to 70/30.
The appellant disputed the novelty of claim 1 of auxiliary request 13 in view of the disclosure of D8. The aqueous PSA composition of D8 comprises an acrylic polymer dispersed in water (claim 1), wherein the acrylic polymer is obtained by polymerising a starting monomer material which can be 100% EHA (claim 2), and a mixture of acrylic acid (AA) and methacrylic acid (MAA) (claim 3). The aqueous PSA composition further comprises up to 50% by weight of a tackifier (claim 7), the preferred amount of the tackifiers being from 20% to 40% and the preferred tackifiers being rosin ester-based tackifiers as disclosed in the general part of the description (column 4, lines 27 to 32). Because the above-cited passages describe preferred aspects of the invention of D8 in rather general terms, the skilled reader would consider their combination and arrive at something falling within the scope of claim 1 of auxiliary request 13. It should be mentioned at this juncture that this assessment of novelty is consistent with the combination criteria applied by the board when assessing whether claim 1 of each request discussed at the oral proceedings, and in particular auxiliary requests 13 and 7 (see point 11.1 below), fulfilled the requirements of Article 123(2) EPC. In fact, as pointed out in G 1/03 (OJ EPO 2004, 413, point 2.2.2 of the reasons), "the concept of disclosure must be the same for the purposes of Articles 54, 87 and 123 EPC".

Thus D8 discloses the subject-matter of claim 1 of auxiliary request 13, so that auxiliary request 13 is not allowable.

10.  Auxiliary request 26

10.1 Novelty
Compared with claim 1 of the main request, claim 1 of auxiliary request 26 additionally requires that the starting monomer material contains butyl acrylate (BA) and 2-ethylhexyl acrylate (EHA) as the alkyl(methyl)acrylates with a content ratio of BA to EHA of 5:95 to 60:40.

D8 discloses that the PSA emulsion may contain a mixture of BA and EHA without, however, disclosing any ratio of these two components (column 2, lines 57-60; claim 2). Thus, the subject-matter of claim 1 is novel over D8 on terms of the content ratio of BA to EHA. The appellant did not contest this fact.

10.2 Inventive step

However, the appellant disputed the inventive step of the subject-matter of claim 1 of auxiliary request 26.

10.2.1 The closest prior art

The parties disagreed on the document to be considered as the closest prior art. The board remarks that D8 relates to PSA emulsions and, like claim 1 of auxiliary request 26, belongs to the field of pressure-sensitive adhesives. The PSA compositions of D8 are also structurally very similar to the PSA composition of claim 1 of auxiliary request 26; only the BA:EHA ratio is not restricted. Therefore the board concurs with the appellant that D8 is the closest prior-art document and constitutes the most promising springboard towards the claimed subject-matter.

D7 is considered less relevant than D8. Although D7 concerns PSA emulsions, the PSA compositions disclosed
are less similar to the compositions of claim 1 of auxiliary request 26 than those of D8 since
(i) the BA:EHA ratio ranges between 95:5 and 40:60 (paragraph [0022]) and is therefore different from that claimed, and
(ii) either acrylic acid (AA) or methacrylic acid (MAA) is used in the starting monomer material, but not both. D7 discloses the use of AA in the examples and MAA in paragraph [0046] and claim 6.

10.2.2 The technical problem

The board remarks that in the absence of any technical effect resulting from the differentiating feature of claim 1 over D8, namely the specific BA:EHA ratio, the technical problem underlying the claimed invention in view of D8 can only be seen in the provision of an alternative PSA composition.

10.2.3 Obviousness

D8 already suggests the use of a mixture of EHA and BA (claim 2). Thus the skilled person starting from D8 and looking for alternative PSA compositions would manufacture PSA compositions with various BA:EHA ratios, including the BA:EHA ratio claimed, as part of his ordinary/routine activities. He would therefore arrive at the claimed subject-matter without the exercise of inventive step. Therefore, the claimed composition is obvious in view of D8 considered alone.

10.3 As the subject-matter of claim 1 of auxiliary request 26 lacks an inventive step, this auxiliary request is not allowable.
11. Auxiliary request 7

11.1 Amendments under Article 123(2) EPC

Claim 1 of auxiliary request 7 refers to the use of a double-sided pressure-sensitive adhesive sheet for bonding a foam member to an adherend.

The appellant acknowledged that each and every feature of claim 1 was disclosed in the application as filed. However, it disputed that the combination of these features was disclosed in the application as filed. Nevertheless, the board came to the conclusion that the claimed combination derived directly and unambiguously from the application as filed, without singling out specific embodiments and without creating new subject-matter not disclosed in the application as filed.

The board remarks that the feature defining the alkyl(meth)acrylate content of the starting monomer material as being preferably 80 mass% or more is based on paragraph [0017] of the application as filed, which is clearly a general technical teaching applicable to all aqueous PSA compositions of the application as filed.

Moreover, the amount of tackifier is based on claim 4 as filed, which is a claim containing a reference to all preceding claims, thereby clearly identifying that the teaching of claim 4 relates to all aqueous PSA compositions of the application as filed.

Furthermore, the list of tackifying resins now required in claim 1 is based on paragraph [0052] of the application as filed. While this list does not contain all originally disclosed alternatives, the deletion of
some of them only further restricts the original disclosure without singling out a specific embodiment.

Lastly, the use of a double-sided PSA sheet for bonding a foam member to an adherend is disclosed in paragraph [0103] and is a general teaching applicable to all aqueous PSA compositions of the application as filed.

Accordingly, the combination of the features of claim 1 complies with Article 123(2) EPC.

11.2 Clarity of the subject-matter of claim 1

The appellant disputed the clarity of claim 1 in view of the terms "rosin-based resins", "rosin derivative resins" and "terpene-based resins" used. The appellant argued that not only were these terms not defined in the patent in suit but they also were overlapping, thus depriving the skilled person from establishing the exact scope of protection conferred by the claimed subject-matter.

The board, however, considers that the skilled person would derive from paragraph [0052] of the patent in suit a suitable explanation of the terms "rosin-based resins", "rosin derivative resins" and "terpene-based resins". Furthermore, as submitted by the respondent in "Enclosure Resin" filed on 22 November 2012, this type of definition for tackifying resins is common in the art. This was not disputed by the appellant. Consequently, the board concludes that the subject-matter of claim 1 satisfies the requirements of Article 84 EPC.
12. Novelty

The appellant did not raise any objection concerning the novelty of claim 1 of this request. The board acknowledges the novelty of the subject-matter of claim 1, since none of the cited documents discloses the specific use of the aqueous PSA compositions.

13. Inventive step

13.1 Closest prior art

As regards the closest prior art, the situation changes from auxiliary request 26 to auxiliary 7. Now D7 has to be considered the closest prior art, because it discloses PSA rubber foam sheet (see paragraph [0001]), a relevant element of claim 1 of auxiliary request 7.

D7 aims at the improvement of the "edge peeling test" (paragraph [0112] and figure 9) which is based on the same phenomenon as the "foam repulsion resistance" described in the patent in suit (see paragraph [0081]). This concerns the peeling off a foam sheet applied to one side of a PSA sheet, while the other side of the PSA sheet is applied firstly to one side of an ABS (acrylonitrile-butadiene-styrene copolymer resin) plate, then folded and applied to the second side of the ABS plate. The "edge peeling test" of D7 and the "foam repulsion resistance test" of the patent in suit differ only in the conditions of storage before measuring the degree of peeling off; thus according to D7 this takes place after storage in a 70°C atmosphere for 2 hours, while according to the patent in suit it takes place after storage at 23°C for 24 hours and further storage at 70°C for 2 hours.
As mentioned above, D7 discloses all the features of claim 1 except that the starting monomer material contains both AA and MAA. In fact D7 discloses PSA compositions comprising either AA (examples) or MAA (paragraph [0046]).

13.2 The technical problem

In order to demonstrate the critical nature of the presence of both AA and MAA in the starting material and to directly compare the results of D7 with those in the patent in suit, the respondent filed additional technical evidence with enclosure C. This technical evidence concerned the repetition of example 1 of D7 and the measurement of the "foam repulsion resistance" of the PSA in accordance with the method described in the patent in suit. The result of example 1 according to D7 (only AA) showed a lift height of 10.0 mm which was poor compared with the results of examples 2-4 according to the claimed invention (AA and MAA in various ratios), whose lift height ranged between 0.9 and 1.4 mm.

On the basis of the above experimental results, the technical problem underlying the claimed invention in view of D7 is seen in the provision of an improved foam repulsion resistance.

13.3 Obviousness

13.3.1 The skilled person starting from D7 and aiming to improve the foam repulsion resistance of the PSA sheet would not find any motivation in the art to use an aqueous PSA composition in which the starting monomer material contains AA and MAA. Therefore the subject-
matter of claim 1 is not obvious and claim 1 involves an inventive step.

13.3.2 The appellant referred to D3 which discloses the use of AA and MAA in the manufacture of PSA sheets. However, the skilled person would not have consulted this document and if so would not have combined it with D7 because it deals with a different problem, namely the improvement of the removability/releasability of the specific PSA sheets from an adherend, this improvement consisting in avoiding spoiling the adherend with PSA remnants in case of peeling off (abstract; paragraph [0014]).

13.4 The appellant also argued that D8 should be considered as the closest prior art. However, this document does not contain the least hint to use the PSA composition disclosed therein in the manufacture of a double-sided PSA sheet for bonding a foam member to an adherent, even less that such a use would improve the foam repulsion resistance of the sheet. Thus the argument of the appellant is based on an ex-post facto analysis which cannot be taken into account.

13.5 Dependent claims 2 and 3 of auxiliary request 7 which correspond to specific embodiments of claim 1 likewise involve an inventive step.

13.6 Consequently, auxiliary request 7 is allowable.
Order

For these reasons it is decided that:

1. The decision is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent on the basis of claims 1 to 3 according to auxiliary request 7 as filed during the oral proceedings before the board, after any necessary consequential adaptation of the description and the figures.

The Registrar: The Chairman:

M. Cañueto Carbajo W. Sieber

Decision electronically authenticated