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Datasheet for the decision of 29 January 2009

Case Number: T 1205/06 - 3.3.03

Application Number: 99956637.5

Publication Number: 1155084

IPC: C08L 63/00

Language of the proceedings: EN

Title of invention:
Sound deadening and structural reinforcement compositions and methods of using the same

Patent Proprietor:
Sika Corporation

Opponents:
Henkel AG & Co. KGaA
Core Products SAS

Headword:
-

Relevant legal provisions:
EPC Art. 100(b)
RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):
EPC Art. 108
EPC R. 64, 78(2), 83(4)

Keyword:
"Opposition grounds - insufficiency of disclosure (yes)"
"Late-filed requests (not admitted)"

Decisions cited:
J 0010/07, T 0220/83, T 0226/85, T 0169/89, T 0409/91, T 0435/91

Catchword:

-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1205/06 - 3.3.03

D E C I S I O N
of the Technical Board of Appeal 3.3.03
of 29 January 2009

Appellant: (Patent Proprietor)
Sika Corporation
30800 Stephenson Highway
Madison Heights
MI 48071 (US)

Representative:
Isler, Jörg
c/o Sika Technology AG
Geschäftsstelle Zürich
Tüffenwies 16
Postfach
CH-8048 Zürich (CH)

Respondent: (Opponent 01)
Henkel AG & Co. KGaA
Henkelstrasse 67
D-40589 Düsseldorf (DE)

Representative:
Endres, Helmut
Henkel AG & Co. KGaA
VTP Patente
D-40191 Düsseldorf (DE)

(Opponent 02)
Core Products SAS
6 rue Ampere
F-67120 Duttlenheim (FR)

Representative:
Bawden, Peter Charles
Bawden & Assoicates
4 The Gatehouse
2 High Street
Harpenden
Hertfordshire AL5 2TH (GB)

Decision under appeal: **Decision of the Opposition Division of the European Patent Office dated 18 May 2006 and posted 2 June 2006 revoking European patent No. 1155084 pursuant to Article 102(1) EPC 1973.**

Composition of the Board:

Chairman: R. Young
Members: A. Däweritz
C.-P. Brandt

Summary of Facts and Submissions

I. The grant of European patent No. 1 155 084 in respect of European patent application No. 99 956 637.5, filed on 22 October 1999 as the international patent application PCT/US1999/024795 and claiming the priority of 5 November 1998 of an earlier application filed in the U.S.A. (186537), was announced on 23 June 2004 (Bulletin 2004/26). The patent was granted with fifty-six claims. On 4 May 2005, a Corrigendum having Figures 1 to 4 added was published. The granted claims comprised the following independent claims:

1. An expandable sealing body comprising a synthetic resin composition including a quantity of a first thermoplastic resin mixed with from about 30-45% by weight of an epoxy resin based upon the total weight of the composition taken as 100% by weight, said body exhibiting at least about 95% expansion after heating of the body to a temperature of at least about 149°C (300°F) and said body having a compressive strength of at least about 1200 psi after expansion.

27. A method of forming an expanded sealant and baffle body comprising the steps of:

(a) providing a quantity of a pre-mix, said pre-mix being formed by a process comprising the steps of mixing a first thermoplastic resin and an epoxy resin to form a mixture and heating said mixture to a temperature of at least about 79°C (175°F) to form said pre-mix;
(b) mixing a compound with said pre-mix to form an intermediate mixture, said compound being selected from the group consisting of pigments, reinforcers, and mixtures thereof; and
(c) mixing an ingredient with said intermediate mixture, said ingredient being selected from the group consisting of blowing agents, curing agents, catalysts, and mixtures thereof to yield an expandable composition as defined in claim 1, wherein said expandable composition exhibits at least about 95% expansion after heating of said expandable composition to a temperature of at least about 149°C (300°F); and
(d) heating said expandable composition by subjecting the composition to a temperature of at least about 149°C (300°F) to yield said expanded body having a compressive strength of at least about 1200 psi:

42. A sealant and baffle device for sealing a cavity of a vehicle body, said device comprising:

a lattice-type support presenting a plurality of elongated lattice-forming elements with corresponding lattice openings therebetween; and
an expandable synthetic resin body operably coupled with and supported by said lattice-type support, said body comprising a synthetic resin composition including a quantity of a first thermoplastic resin and from about 30-45% by weight of an epoxy resin based upon the total weight of the composition taken as 100% by weight, the body having a temperature at which it begins to expand, said body being expandable at least partially through said lattice openings and exhibiting at least 95% expansion upon heating thereof to a temperature of at least about 149°C (300°F), said body having a compressive strength of at least about 1200 psi after expansion,

said elements having a melting point higher than said expansion temperature of said body.

56. A composition as defined in claim 1 which comprises a quantity of different first and second thermoplastic resins mixed with from about 30-45% weight of an epoxy resin.

The remaining dependent Claims 2 to 26, 28 to 41 and 43 to 55 were appendant to the above Claims 1, 27 and 42, respectively.

In this decision, references to passages in the patent in suit as granted will be given underlined in squared brackets, eg [Claim 1], those to the initial application text as published in WO-A-00/27920 will be shown in underlined italics, eg *page 1, lines 1 to 5*. "EPC" refers to the revised text of the EPC 2000, the previous version is identified as "EPC 1973".

II. On 18 and 22 March 2005, two Notices of Opposition were filed, in which the revocation of the patent in suit in its entirety was requested on the basis of Articles 100(a) and (b), and 100(a), (b) and (c) EPC 1973, respectively.

(1) Opponent 1 (O-01) raised objections to lack of novelty and lack of inventive step of the subject-matter of Claims 1, 27 and 42. It contended further that the claims appendant to these independent claims would not reveal further features, which could contribute to patentability. Moreover, it asserted that the subject-matter of Claim 1 would not comply with the requirements of Article 83 EPC 1973.

(2) Opponent 2 (O-02) raised objections of lack of novelty and lack of inventive step, insufficiency of disclosure and added subject-matter (ie extension beyond the content of the application as filed).

At this stage, the Opponents cited nine documents to support their objections under Article 100(a) EPC 1973.

(3) In a further letter dated 13 March 2005, O-01 explained its objection under Article 100(b)/83 EPC 1973 in more detail and referred to some passages in decisions T 435/91 (OJ EPO 1995, 188), T 409/91 (OJ EPO

1994, 653) and T 226/85 (OJ EPO 1988, 336) in support of its arguments to this issue.

(4) On 18 May 2006, oral proceedings were held before the Opposition Division, at which the Patent Proprietor requested the maintenance of the patent as granted and submitted four auxiliary requests. All these requests were discussed with regard to the objections under Articles 100(a) and (b) EPC 1973. The objection under Article 123(2) EPC 1973 was not, however, maintained by O-02 any longer.

In Auxiliary Request 1, independent [Claims 1, 27 and 42] (section I, above) had been amended by addition of "*using a sample having a diameter of 2 inches and a length of 4 inches and a compression rate of 0.5 inches/minute.*" after the feature concerning the compressive strength in each of these claims. The other claims of this request remained as granted.

The wording of this Auxiliary Request formed also the basis for the following further amended Auxiliary Requests 2 to 4, which are, however, irrelevant for the present decision.

III. In the decision announced at the end of the above oral proceedings and issued in writing on 2 June 2006, the Opposition Division revoked the patent on the basis of the finding, that the ground for opposition mentioned in Article 100(b) EPC 1973 prejudiced the maintenance of the patent in suit as granted and that none of Auxiliary Requests 1 to 4 (section II, above) met the requirements of Article 56 EPC 1973.

(1) The decision on the main request was based on the fact that two tests for determining "*the compressive*

strength" (Claim 1: of "*at least about 1200 psi*") were described differently in the general description [0026] (ie by using a sample having a diameter of 2 in. and a length of 4 in. and a compression rate of 0.5 in./min) and in paragraph [0041] (ie in the examples: using samples having a thickness of 10 mm and a size of 1 in. (2) × 1 in. after aging at 90°C for 4 h).

Since examples would, in general, be carried out in order to demonstrate the benefits of the invention, and the methods used therein should usually comply with the requirements of the claims, it was held that a skilled reader, when looking at the various definitions for evaluating the compressive strength in the patent in suit, could not be sure which specimen size was to be used and whether or not an aging step should be carried out, and the Patent Proprietor's arguments, that it had been clear for the skilled reader which method was to be used, because only the definition in [0026] was linked with the requirement of "*at least about 1200 psi*" in Claim 1, was not deemed convincing.

Rather, the claimed subject-matter as defined in the Main Request (ie [Claim 1]) was found not to be disclosed in a sufficiently clear manner, contrary to Article 83 EPC 1973, because the two methods for the determination of the compressive strength apparently resulted for a given composition in significantly different values, as shown in a first Test Report by David Kosal and in further tests, submitted by O-02 in its letters of 27 March and 2 May 2006, respectively. The question of whether the examples provided had been exact repetitions of examples of the invention was not deemed pertinent in this situation.

(3) As it had been clarified in all auxiliary requests, that the method of paragraph [0026] should be used to define the limits of the invention, the Opposition Division took the view that, with regard to these auxiliary requests, it had been made sufficiently clear, what the skilled reader should do when carrying out the invention. This finding was, furthermore, found to be confirmed by [Examples 2 to 5] providing, in the Opposition Division's opinion, sufficient information for carrying out the invention.

The Opposition Division did not accept the additional arguments of both Opponents, that the present claims would be unreasonably broad due to the parametric definition and the sole other requirement, that a certain amount of epoxy resin and a minimum amount of thermoplastic resin should be present, and that the claims of all requests would, therefore, fail to disclose what fell within the scope of the claims, so that the disclosure was insufficient. Instead, it was held that the discussion at the oral proceedings had shown that the expansion rate and the compressive strength after expansion were reversely related to each other, so that the limitations in terms of the limited percentage of the epoxy resin contained in the total composition and of the two parameters in conjunction with the minimum temperature of at least 149°C would not result in an unduly broad claim.

Consequently, the Opposition Division came to the conclusion that the requirements of the claims as amended according to the auxiliary requests and the description in [0026] and [0041]/[page 7, lines 23 to 28] described the claimed subject-matter in a sufficiently clear manner to be carried out and,

therefore, the objection under Article 100(b) EPC 1973 was rejected with respect to the auxiliary requests.

(4) With regard to novelty, the Opposition Division took the view that the literature cited by the opponents disclosed expandable compositions containing epoxy resins and thermoplastic resins within the required amounts and that at least part of these known compositions expanded by more than 95%. However, the Opponents had failed to demonstrate that the cited art also disclosed expandable sealing bodies having the required compressive strength when expanded.

In summary, the Opposition Division decided that the requirements of novelty were fulfilled by all requests.

(5) The question of inventive step was considered in the decision under appeal at first in relation to Auxiliary request 1.

(6) The problem to be solved with regard to the closest state of the art was seen in "*the provision of expandable sealing bodies having a higher stiffness for, e.g., self-sustaining parts (cf. paragraph [0001] of the contested patent).*"

(7) This problem was solved, according to the decision under appeal, by selecting an expandable sealing body having, when heated to at least 149°C, a sufficiently high expansion of at least 95% and a compressive strength of at least 1200 psi (cf. Claim 1).

(8) In view of the arguments provided by the parties, the Opposition Division decided that it was obvious to arrive at the claimed solution by modifying the compositions of the closest state of the art in a way

that yielded the expansion and compressive strength claimed. The modifications were found to be within the general knowledge in that field (e.g. the reduction of the amount of blowing agent), since there was no evidence on file that any other feature(s) was (were) necessary in order to come to the claimed solution (page 10, lines 3 to 8 and 20 to 25 of the decision).

(9) Alternatively, "*If it would have not been obvious there would have been insufficient disclosure over the whole scope of the contested claims under Art. 83 EPC, as objected by the opponents.*" (page 10, lines 14/15).

(10) With regard to Auxiliary requests 2 to 4, the decision under appeal held that the additional features of the claims of the further requests could not establish an inventive step (pages 10 and 11, No. 6.2.2 of the decision).

(11) Consequently, the Opposition Division concluded that "*grounds of opposition put forward prejudice the maintenance of the European patent and it is, therefore, revoked according to Article 102(1) EPC*" (1973).

IV. On 2 August 2006, a Notice of Appeal was filed against this decision by the Patent Proprietor/Appellant, who requested that the decision under appeal be set aside and the patent in suit be maintained as granted (Main Request). The prescribed fee was paid on the same day.

(1) In its Statement of Grounds of Appeal (SGA) received on 12 October 2006, the Patent Proprietor/ Appellant argued that the Opposition Division had correctly stated that the claimed subject-matter could be carried out and was new at least in the scope of Auxiliary Request 1 as refiled therewith. Since these

items were not contested, the Appellant referred only to the opposition file in this respect.

(2) As regards the decision made on the Main Request in respect of Article 83 EPC 1973, the Appellant argued that the subject-matter according to the Main Request was disclosed in a manner sufficiently complete to be carried out. Amendment of the claims would not be necessary, because the method for determining the compressive strength was clear from the description.

(3) Then the Appellant turned to the question of inventive step of Auxiliary Request 1. In this respect, it disputed the findings in the decision under appeal. In particular, it argued that whilst expansion and compressive strength might be correlated in some way, it could not, however, be derived from the closest state of the art that, upon decreasing the amount of blowing agent, foams having the claimed compressive strength would be the inevitable result. The different conclusion of the Opposition Division could only be explained by assuming that the Opposition Division had taken the experiments of O-01 to the closest state of the art into account, contrary to a decision made during the oral proceedings (Item 4.3 of the Minutes) and it asserted, that it had been deprived of its right to be heard with regard to the above comparative experimental data and also with regard to the independent claims 27 to 56, because the discussion at the oral proceedings had focused on Claim 1 only.

(4) Therefore, it requested that the case be remitted to the Opposition Division. This request was, however, withdrawn later, in the course of oral proceedings held on 29 January 2009 before the Board.

(5) Together with the above arguments the Appellant refiled Auxiliary Request 1 (section II(4), above) and submitted a sheet "Submission regarding E4" which did not, however, play any role in the further proceedings.

V. In letters dated 21 February 2007 and 2 May 2007, respectively, the two Respondents disputed all the arguments of the Appellant. In particular, Respondent/O-01 disputed the Appellant's comments on insufficient disclosure, inventive step and the right to be heard. Respondent/O-02 gave its arguments with regard to the objections of insufficient disclosure, novelty and inventive step and it refiled Mr Kosal's first Test Report (as mentioned in section III(1), above).

VI. After the summons to this hearing issued on 31 October 2008, the Appellant submitted, in a letter dated 24 December 2008, new Auxiliary Requests 2 to 4, all being based on the claims of Auxiliary Request 1. In that request, the feature "*using a sample having a diameter of 2 inches and a length of 4 inches and a compression rate of 0.5 inches/minute*" had been incorporated in each of its Claims 1, 27 and 42 (see section II(4), above).

(1) In each one of Claims 1, 27 and 42 of Auxiliary Request 2, the above amendment was further supplemented by "*and said epoxy resin comprising a liquid and a solid epoxy resin*". Furthermore, Claim 14 was deleted, followed by amendment of the reference in Claim 15 to read "*The body of claim 1 ...*", and in each of Claims 37 and 48, the word "*liquid*" was inserted between "*said*" and "*epoxy resin*".

(2) In Auxiliary Request 3, Claims 1 to 26 and 42 to 56 were deleted, whilst Claims 27 to 41 of Auxiliary Request 1 were retained as new Claims 1 to 15.

(3) In each one of Claims 1, 27 and 42 of Auxiliary Request 4, the above amendment in Auxiliary Request 1 was further supplemented by "*further including a reinforcer which is hydrated amorphous silica*".

VII. In a letter dated 12 January 2009, as received on 13 January 2009, Respondent/O-02 raised an objection concerning the admissibility of the appeal, referred to this end to two decisions, T 220/83 (OJ EPO 1986, 249) and T 169/89 of 23 October 1990 (not published in the OJ EPO) and additionally requested apportionment of costs, because it was of the opinion that the appeal would be inadmissible. Moreover, it filed a second (experimental) Report by Mr Kosal and, in a further letter dated 14 January 2009, further documents, which played, however, no role in the further proceedings.

Furthermore, in the first of these letters, Respondent/ O-02 further commented on inventive step and, with reference to a number of decisions and to Mr Kosal's two Reports, also on insufficiency of disclosure. The Reports were to show that "*when the combination of conditions specified for the two different tests are used different values for compressive strength are obtained*", "*that very different percent expansions and compressive strengths are obtained according to the size of sample, the method of preparation of the sample and the heating cycle employed*" and "*that the same material can be heated to at least 149°C as different size samples and for different heating conditions and can have a percent expansion of greater or less than*

95% depending upon the conditions used." The requirement in all requests, that the compositions contain i) a quantity of thermoplastic resin and ii) 30 to 45 wt% of an epoxy resin, would be insufficient to enable the skilled man to obtain a body (a) exhibiting at least about 95% expansion and (b) "*a compression strength of at least about 1200 psi (however measured)*". Rather, an extensive research programme would be necessary to determine (i) how much thermoplastic resin was required, (ii) the nature of the thermoplastic resin to be used, (iii) the nature of the epoxy resin to be used and (iv) other ingredients that might be required (Respondent's letter of 12 January 2009, pages 3 to 5).

VIII. The first issues discussed at the oral proceedings (as mentioned in section IV(4), above) were the Respondent/O-02's assertion, that the appeal was not, according to Rule 101 EPC, admissible, and its request for apportionment of costs.

(1) Respondent/O-02 justified these requests by putting particular emphasis on one requirement in the wording of Rule 99(2) EPC, that the Appellant should have indicated in its SGA the facts and evidence on which the appeal was based. Since the latter requirement was not, according to the Respondent, fulfilled the appeal should be rejected as inadmissible under Rule 101(1) EPC. Respondent/O-01 supported these arguments and requests of Respondent/O-02.

In particular, the Appellant had not, in the Respondents' opinion, dealt with the issue of insufficient disclosure with regard to the Main Request. Nor would the above requirement of Rule 99(2) EPC be met by the reference on page 1, paragraph 2 of

the SGA (section IV(2), above). Instead of providing any facts or evidence, the Appellant would, thus, have provided only its own conclusion. Nor would it, as regards inventive step, have dealt with (i) both parts of the key statement in the decision under appeal (as quoted in section III(9), above) or (ii) the arguments on the basis of prior art as dealt with in the decision under appeal (cf. sections III(5) to III(8), above).

(2) The Appellant, however, argued that there was no reason not to admit the appeal, because (i) sufficient information had been given in the patent in suit itself and (ii) O-01 had suggested that the ranges as defined in the claims would be achieved automatically. Moreover, it had explained, starting on page 1, last paragraph of the SGA, why the skilled person would not, on the basis of the closest state of the art, arrive at the claimed subject-matter in an obvious manner.

Even the hint to the description on page 1 of the SGA concerning the question of whether the Main Request complied with Article 83 EPC would be sufficient.

(3) In this context, the discussion then touched on the question of whether EPC 1973 or the new version of the EPC was applicable.

(4) After deliberation, the Board informed the parties that the appeal was admissible and checked with the Respondent/O-02 whether it maintained its request for apportionment of costs, which was not the case. Rather, this request was withdrawn by the Respondent.

(5) At the outset of the discussion about the substantive issues and objections raised in the oppositions, the Chairman recalled, in his introduction,

the preliminary, provisional view of the Board as regards the objections, which had been raised in the examination and opposition stages with respect to the wording of the claims, in particular with regard to Article 100(b) EPC.

Thus, the Chairman referred to the Examining Division's Communication of 9 April 2003 (items 1 and 2), where the claims had been deemed extremely broad and unclear, since "*the Applicant tries to claim any mixture of thermoplastic resins with 30 to 45 % of epoxy resin having a certain property*" and "*since it is not possible to foresee which thermoplastice resin mixed with which kind of epoxy resin and mixed with a not defined expansion- or other additive would exhibit said property without an undue burden of numerous experiments (cf. Case Law ...*". As "*In the examples only very particular compositions were shown to exhibit the required property, e.g. a mixture of SBS, styrene with epoxy resins and containing particuler amounts of glass microsheres [sic], blowing agents and particular silica fillers show the required property when heated*", it would have been self-evident that not any epoxy/ thermoplastic resin mixture with a certain compressive strength and expansion ("*even the Applicant will by far not know all mixtures with which said property may be obtained*") was suitable for obtaining a sealant, noise damping and reinforcing composition, which had been the object to achieve (the problem to be solved) as seen by the Applicant, rather than the specific property as defined in the claims.

Moreover, the Chairman referred to the oral proceedings of 18 May 2006 (cf. section III, above), at which,

according to the minutes (page 2), these issues had already been considered with regard to Article 83 EPC.

In its reply (dated 15 August 2003) to the above Communication of the Examining Division (the arguments of which had been based, in the Applicant's opinion, on case law dealing with the question of functional features), the Applicant had argued (page 3, first complete paragraph) that Claim 1 would not have claimed the function of the composition, but would have concerned compositions clearly defined by measurable material characteristics. However, Claim 1 did indeed relate, in the preliminary, provisional view of the Board, to subject-matter defined in terms of a functional feature ("*An* ***expandable*** *sealing body*", emphasis added). Therefore, the question arose of (i) whether the specification disclosed a technical concept fit for generalisation, which was necessary, according to decision T 435/91 (OJ EPO 1995, 188), for the acknowledgement of sufficiency of disclosure, and (ii) which measures formed the basis for this concept, ie were necessary for finally achieving the desired compressive strength and expansion. As already argued by the Opponents/Respondents, even the [examples] did not appear to provide a clear indication which compositions within the scope of the claim would, in fact, work. Thus, from amongst the eight examples disclosed in the patent in suit, four, ie [Examples 1, 6, 7 and 8], apparently failed, even when preferred components were used, eg a blowing agent as used in [Example 1].

In summary, the patent in suit did not, in the preliminary, provisional view of the Board, appear to provide a convergent teaching which would have enabled

the skilled reader to arrive with a reasonable expectation of success, but without an undue amount of experimental work, at a composition showing the desired properties, as defined in Claim 1.

(6) The Appellant pointed out that the aim of the claimed subject-matter was the achievement of a combination of distinct properties, which could be measured, and that the description provided a selection of conceivable components, eg of epoxy resins, which could be combined with the other components, namely the thermoplastic resins to achieve this goal. A selection of suitable components and of compositions of these components had further been specified in the [examples] and in the examples provided by the Opponents (eg in Mr Kosal's second Report; section VII, above), which would have enabled the skilled reader to determine the range of working examples. Thus, Mr Kosal's second Report had indicated, in the Appellant's opinion, that Respondent/O-02 had known what to do.

According to the Appellant, different compositions, the specific features of which would depend on the nature of the components used, could be prepared from starting components chosen within the definitions of [Claim 1], and the answer to the question of whether a particular composition thus obtained complied with the claims, could easily be established by simply measuring its properties as described in the specification. With regard to the question of further components not mentioned in [Claim 1], namely the blowing agent, the Appellant argued that the presence of this component would be an implicitly disclosed feature of a claimed composition.

(7) Respondent/O-02 characterised the subject-matter of Claim 1 as being purely a matter of chance. Thus, both compositions as described in Section I, item 9) of Mr Kosal's first Report (section III(1), above) failed, irrespective of the method used for the determination of the compressive strength (cf. the results in the Report, Section I, items 11) and 12)). This finding on the basis of the Respondents' experiments had even been confirmed by the Appellant itself. Thus, the examples in Mr Chang's two Declarations, which had been filed by the Appellant, had proved that, although the compositional requirements as defined in Claim 1 had been fulfilled, the resulting products did not meet the requirements of Claim 1 with respect to the specific features of expansion and compressive strength.

(8) Respondent/O-01 argued that the patent in suit described very broadly the compounds to be used, with the consequence that the choice of compounds did not necessarily result in the desired product. In other words, the patent in suit would not provide a "Lehre zum technischen Handeln" (practical technical teaching), in the sense, that the patent in suit did not teach specific combinations of measures which would allow to obtain, with a high degree of probability, products having the desired properties. This task would not be satisfied simply by determining the properties of the products afterwards. The available examples and experiments would, however, show that even marginal changes of the recipes resulted in products with unpredictable properties. In particular, even the [examples] would show that the desired properties could only be achieved by chance.

(9) When the parties indicated, that they did not intend further comments on this issue, the oral proceedings were interrupted for deliberation of the Board. When the hearing was resumed, the Board gave its decision that the Main Request of the Appellant (maintenance of the patent in suit as granted) was refused.

(10) The Appellant maintained its Auxiliary Requests 1 to 4 (sections IV(1)and VI, above).

(11) According to the Appellant, the goal to be achieved by Auxiliary Request 1 had been to meet the problem that, depending on the method used for the determination of the compressive strength, different values had been obtained in Mr Kosal's first Test Report. In the Respondents' opinion, the limitation of Claim 1 to the definition of the compressive strength to measurements according to the method disclosed in [0026], did not, however, remedy the deficiencies already discussed in respect of the Main Request, because this amendment did not contribute to the question of how to obtain the claimed products.

(12) The further Auxiliary Requests 2 to 4 were, according to Respondent/O-01, late-filed und should not, therefore, be admitted, because they would give rise to additional questions concerning their admissibility and allowability. Thus, Auxiliary Request 2 would not comply with Article 123(2) EPC. Nor would these auxiliary requests comply with Rule 80 EPC. Asked for a justification for their late filing, the Appellant stated only that, in the preparation for the oral proceedings, the opinion had been formed that these

requests might offer better chances for the patent in suit to be maintained in amended form.

(13) Since no further remarks were given by the parties the oral proceedings were interrupted for the deliberation of the Board on these requests.

IX. The final requests of the parties were as follows:

The Appellant requested that the decision under appeal be set aside and the patent in suit be maintained as granted or, in the alternative, on the basis of Auxiliary Request 1 submitted with the Statement of Grounds of Appeal (Claims 1 to 56) or on the basis of one of Auxiliary Requests 2 to 4 submitted with the letter dated 24 December 2008 (Auxiliary Request 2: Claims 1 to 56; Auxiliary Request 3: Claims 1 to 15; Auxiliary Request 4: Claims 1 to 56).

The Respondents requested that the appeal be dismissed.

Reasons for the Decision

1. *Admissibility of the appeal*

1.1 The SGA was received on 12 October 2006, ie within the time limit set by Article 108 in conjunction with Rules 78(2) and 83(4) EPC 1973. The Board has no reason to deviate from decision J 10/07 (OJ EPO 2008, 567, Nos. 1 to 1.3, in particular No. 1.2, paragraph 3 of the reasons), wherein the legal Board had taken the view that "*Therefore, the decision as to whether an appeal can be considered admissible according to the relevant provisions, geared to the fulfilment of the requirements for admissibility within a certain legally*

defined period, depends entirely on the substantive and legal position at the time of expiry of the time limits. Since the belated fulfilment of admissibility requirements after the expiry of the relevant time limit cannot be taken into account in the examination of admissibility, so too a change in the legal position occurring after the expiry of the time limit for fulfilling the admissibility requirements can have no impact, either to the appellant's advantage or to his detriment, on the assessment of admissibility." and (in No. 1.3) "*If the examination as to admissibility of the appeal in the present case is governed by the above-mentioned Articles of the EPC 1973, the same also applies to the provisions of the EPC Implementing Regulations which specify and supplement those Articles. The applicable implementing provision, therefore, is Rule 64 EPC 1973, which is linked to Article 108 EPC 1973, and not the corresponding Rule 99 EPC, ...*".

1.2 The SGA, as referred to in sections IV(1) to IV(5), above, identified the Appellant (page 1, including its name and address) and contained also the same requests as those before the Opposition Division (page 3, last three lines and page 4, lines 1 and 2; Main and first Auxiliary Requests). Moreover, the Appellant indicated that it agreed to the decision under appeal concerning Article 83 EPC 1973, insofar as at least ("zumindest") Auxiliary Request 1 had been found to be workable ("ausführbar") and new. As regards the Main Request, the Appellant asserted that the method for determination of the compressive strength would have been clear from the description. Furthermore, the Appellant explained its point of view concerning the question of inventive step of the subject-matter according to Auxiliary Request 1,and disputed the

arguments to this issue in the decision under appeal (page 1, the last two lines to page 3, paragraph 2), rather than contenting itself with asserting that the contested decision was incorrect. Whether the arguments provided would be convincing is not, however, a matter of admissibility.

In view of these findings and of the facts, that the appeal was filed by an party adversely affected by the decision under appeal and that an appeal can only be found admissible or inadmissible in its entirety, the Board is satisfied that the requirements of Articles 106 to 108 EPC 1973 were met on the day of expiration of the time limit according to Article 108 and Rules 64, 78(2) and 83(4) EPC 1973. These findings of this Board are not inconsistent with the views taken by the respective Boards in view of the respective different situations in the cases underlying the decisions T 220/83 and T 169/89 (above), respectively.

1.3 Consequently, the appeal is admissible.

2. *Main Request*

2.1 Whilst "*in general the examples are made in order to demonstrate the benefits of the invention and the methods used therein usually should comply with the requirements of the claims*", the two different methods for determining the compressive strength disclosed in the specification, gave, however, significantly different values, as demonstrated by O-02's experiments. Therefore, "*the invention as defined in the main request is not sufficiently clearly disclosed*" so that, in the Opposition Division's view, the requirement of Article 83 EPC 1973 was not met (decision under appeal: page 6, lines 8 to 16).

2.2 In the Board's view, this reasoning in the decision under appeal concerns the question of whether the definition of the compressive strength parameter was clear (Article 84 EPC), rather than the question of whether the claimed subject-matter was disclosed in a manner clear and complete for it to be carried out. In fact, [Claim 1] does not exclude either method for determination of the compressive strength, ie neither the one described in [0026], nor the other described in the [examples] (see [0041] and Footnote a below each of [Tables 2 to 8], respectively). Moreover, the specification contains some examples in which the limit of this parameter (however measured) of at least about 1200 psi, as defined in [Claim 1], had been achieved.

2.3 The first issue of importance for the allowability of the Main Request under Article 83 EPC does not, however, concern the question of whether the result of a given example formally meets the requirements of the claims, ie of whether a method is provided in the specification which allows to verify the compressive strength value specified in the given example. The first issue rather concerns the question of whether the extent of the monopoly, as defined by the claims, corresponds to the technical contribution of the patent in suit to the art or whether the claims extend to subject-matter, which, after reading the description, is still not at the disposal of the person skilled in the art.

2.4 According to [0008], the patent in suit aims at the provision of an *injection mouldable*, *expandable*, *lightweight* composition "*which acts as both a sealant ... and a baffle ...*" In [0009] it is stated that this goal would be achieved by compositions

comprising mixtures of thermoplastic resin(s) and an epoxy resin, which compositions would be *injection mouldable* and *lightweight* and which would have *high compressive strengths*, and which, according to [Claim 1], should be in the form of an *expandable* body. Two of these three properties (lightweight/expansion and high compressive strength) are, however, features of the *expanded* body after heating (baking), but not of the claimed *expandable* body.

2.5 Whilst some [examples] gave, in fact, expanded products showing values of the two parameters (expansion and compressive strength) as required in [Claim 1], other examples, ie [Examples 1, 6, 7 and 8] (section VIII(5), above), did not, although each of the eight [examples] complied with the compositional requirements of the claim. Thus, each of the synthetic resin compositions in the [examples] comprised at least one thermoplastic resin in combination with 30 to 45 % by weight of an epoxy resin, based on the total weight of the composition taken as 100 % by weight (cf. section I, above).

2.6 Besides, it is noteworthy that the product of [Example 5] although belonging to the [examples] which complied with [Claim 1], was not suitable for injection moulding (contrary to [0009], cf. section 2.4, above).

2.7 In this connection, it is noted that the compositions of the [examples] which result in expandable bodies meeting the requirements of [Claim 1] are rather similar to those which result in expandable bodies which do not. In the case of [Example 2] for instance (successful in meeting the compressive strength), the composition differs from that of [Example 1]

(unsuccessful) only in respect of optional components referred to in purely generic terms in dependent [Claims 20 and 21], respectively. Thus, the composition of [Example 2] contains, as compared with [Example 1], additionally 4.8 g of ZnO and 4 g of catalyst, furthermore, 30 g instead of 64 g of curing agent, 6 g instead of 16 g of blowing agent, 45 g instead of 60g of hydrated amorphous silica and 155 g instead of 140 g of glass microspheres (ie, both compositions equally contain a total amount of 200 g of fillers). Furthermore, the composition of [Example 8] (unsuccessful) differs from that of [Example 3] (successful) only in that 40 g of SBR 1009® crumb (styrene-butadiene rubber) is used instead of 40 g of Nipol 1411® (nitrile-butadiene rubber). In neither case does the differing characteristic correspond to a specific feature of [Claim 1]. Nor was the Appellant able to point to any general consideration which would enable the person skilled in the art in advance to know whether such a preferred composition would fulfil the promise of the patent in suit or not.

Furthermore, given that all compositions exemplified in the patent in suit are relatively complex - each contains at least eight components - and that the nature of the modifications upon which success or failure seems to depend is relatively inconspicuous, coupled with the complete absence of any general guidance in this respect in the description of the patent itself, the Board is forced to concur with the opinion of the Respondents that the subject-matter of [Claim 1] can only be considered as a matter of chance, because, instead of providing a practical technical teaching, it is evident that it would be necessary for the skilled person to establish with considerable trial

and error how to realise the combination of properties as defined in [Claim 1] (cf. sections VIII(7) and VIII(8), above).

2.8 In view of the arguments presented in writing and the above considerations, the Board has found its preliminary, provisional opinion, as presented at the outset of the oral proceedings (section VIII(5), above), confirmed by the statements and arguments brought forward by the parties at the oral proceedings. It does not see, in the specification of the patent in suit, a technical concept fit for generalisation, which would make available to the skilled person the host of variants encompassed by the respective functional definition of [Claim 1]. Rather, the specification offers only the invitation to perform a research programme (cf. Respondent/O-02's argument as referred to in section VII, above) in order to find out which combinations of which ingredients (thermoplastics and additives in combination with 30 to 45 % by weight of an epoxy resin, of which conceivable type; cf. the last sentence in section VII, above) would meet the requirements of [Claim 1] and would provide a product having properties as set out in [0008] and [0009]. In other words, the patent specification (description and claims) does not place all the information necessary for achieving the desired product at the disposal of the skilled person (section 2.4, above; cf. T 435/91, above, in particular No. 2.2.1 of the reasons).

This finding is, if anything, confirmed by the Appellant's argument, that the question of whether a particular composition (derived from any conceivable combination of compounds within the definitions of [Claim 1]) complied with the claims could easily be

established by simply measuring its properties (section VIII(6), above). The Appellant's argument rather supports the preliminary, provisional view of the Board than invalidating the arguments brought forward by the Respondents (sections VIII(5), VIII(7) and VIII(8), above).

Furthermore, as stated in decision T 226/85 (above, in particular in No. 3 of the reasons), "*It is, however, important to note that for sufficiency not only the exemplified specific embodiments must be reproducible but any embodiment which falls within the ambit of the claim. Whilst it is true in the present case that unsuccessful variants are automatically excluded by the two functional requirements incorporated in the claim, this cannot lead to a situation where the skilled person is in great difficulties to find proper embodiments by following the instructions of the specification.*"

2.9 Therefore, the specification as a whole, whilst aiming to define the subject-matter considered by the Patent Proprietor as its invention (as encompassed by [Claim 1]), does not, in fact, meet the requirement of sufficiency of disclosure (cf. Article 83 EPC).

2.10 Since a decision can only be made on a request as a whole, but not on individual claims of a given request, the Main Request must, therefore, be refused, because the ground for opposition according to Article 100(b) EPC prejudices the maintenance of the patent as granted.

3. *Auxiliary Request 1*

Whilst the amendment in Claim 1 of this request may have significance for the question of clarity of the

definition of compressive strength in Claim 1 (sections VIII(11) and 2.2, above), it does not, however, touch on the points discussed with respect to the Main Request, let alone invalidate the reasons given for the refusal of the Main Request (sections 2.3 to 2.9, above). Consequently, Auxiliary Request 1 is refused for the same reasons.

4. *Auxiliary Requests 2 to 4*

Having regard to the request of Respondent/O-01 not to admit these auxiliary requests which had been filed only after the summons to the oral proceedings and in view of the absence of a good and convincing reasons for their late filing by the Appellant, the Board has decided not to admit these requests into the proceedings under Article 13(1) of the Rules of Procedure of the Boards of Appeal of the EPO.

5. In these circumstances, the appeal lodged by the Patent Proprietor cannot be successful.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

E. Görgmaier R. Young