

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 7 March 2018**

Case Number: T 1474/14 - 3.3.03

Application Number: 07111208.0

Publication Number: 1832627

IPC: C08L101/10, C09J201/10,
C09K3/10

Language of the proceedings: EN

Title of invention:
CURABLE COMPOSITION

Patent Proprietor:
KANEKA CORPORATION

Opponents:
Wacker Chemie AG
Henkel AG & Co. KGaA

Relevant legal provisions:
EPC Art. 84, 56

Keyword:
Alleged lack of clarity not examined - not result of the
amendments made
Inventive step - ex post facto analysis

Decisions cited:

G 0003/14, T 0459/09



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1474/14 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 7 March 2018

Appellant: Henkel AG & Co. KGaA
(Opponent 2) Henkelstrasse 67
40589 Düsseldorf (DE)

Representative: Henkel AG & Co. KGaA
CLI Patents
Z01
40191 Düsseldorf (DE)

Respondent: KANEKA CORPORATION
(Patent Proprietor) 2-3-18, Nakanoshima,
Kita-ku
Osaka (JP)

Representative: Hart-Davis, Jason
Cabinet Beau de Loménie
158, rue de l'Université
75340 Paris Cedex 07 (FR)

Party as of right: Wacker Chemie AG
(Opponent 1) Hanns-Seidel-Platz 4
81737 München (DE)

Representative: Mieskes, Klaus Theoderich
Wacker Chemie AG
Intellectual Property
Hanns-Seidel-Platz 4
81737 München (DE)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
15 May 2014 concerning maintenance of the
European Patent No. 1832627 in amended form.**

Composition of the Board:

Chairman D. Semino
Members: F. Rousseau
 R. Cramer

Summary of Facts and Submissions

I. The appeal lies from the interlocutory decision of the opposition division posted on 15 May 2014 according to which European patent No. 1 832 627 as amended according to the documents of the main request (claims as submitted with letter of 22 January 2014 and an amended description thereto) met the requirements of the EPC. Two notices of opposition had been filed requesting revocation of the patent in its entirety.

II. Claim 1 of that request read as follows:

"Use of a curable composition in a seam where the ratio of the displacement width to the average width is 15% or greater, or use of a curable composition as a motor vehicle panel adhesive, wherein for either use said composition comprises:

a polyoxyalkylene polymer (A1) having one or more silicon-containing functional groups capable of cross-linking by forming siloxane bonds in which the one or more silicon-containing functional groups capable of cross-linking by forming siloxane bonds are silicon-containing functional groups each having three or more hydrolyzable groups on one or more silicon atoms thereof; and

a condensate of a tetraalkoxysilane (B)."

Claims 2 to 11 were dependent claims of claim 1.

III. During opposition proceedings, the following documents *inter alia* were cited:

D1: EP 0 918 062 A1

D4: JP 8-127724 A

D5: JP 2001-72855 A

D9: "Building joint movement monitoring and development of laboratory stimulation rigs" by Hutchinson et al., Durability of Building sealants (1999), edited by A.T. Wolf, pages 99-116

D10: "Elastic bonding - The basic principles of adhesive technology and a guide to its cost-effective use in industry" by Burchardt et al., High-Tech Industrial Adhesives, Technical fundamentals and industrial applications, Verlag moderne Industrie, pages 5-71.

IV. According to the reasons for the decision, the requirements of Article 123(2) EPC were fulfilled. The feature defining that "the ratio of the displacement width to the average width is 15% or greater" was originally present in use claim 12 as granted and accordingly the introduction of this feature into claim 1 as granted could not justify the examination of that claim under Article 84 EPC. Novelty was accepted over D4 and D5, since the compositions described therein were not disclosed to be employed for the specific uses defined in amended claim 1. An inventive step was acknowledged, as there was no incentive to choose a polymer with trifunctional silicon groups and to use such a polymer in D4 for making elastic sealants with good creep and recovery properties.

V. Opponent 2 (appellant) lodged an appeal against that decision and filed a statement of grounds of appeal in which objections under Articles 56 and 84 were maintained against the main request. In spite of a request for oral proceedings at that stage the appellant indicated with letter of 14 December 2017 that they would not attend the oral proceedings.

- VI. Opponent 1 (party as of right pursuant to Article 107 EPC, second sentence) indicated with letter of 7 August 2017 that they would not attend the oral proceedings.
- VII. Following the Board's communication sent in preparation of the oral proceedings the patent proprietor (respondent) announced with letter of 26 February 2018 that they also would not attend the oral proceedings.
- VIII. Oral proceedings were held on 7 March 2018 in the announced absence of the parties (Rule 115(2) EPC and Article 15(3) RPBA).
- IX. As far as relevant to the present decision, the appellant's arguments can be summarised as follows:
- (a) Having regard to decision T 0459/09, it was justified to examine clarity of the feature "*where the ratio of the displacement width to the average width is 15% or greater*" present in claim 12 of the patent as granted, because this feature had been incorporated in claim 1, which represented an amendment of a substantial nature to overcome a ground for opposition. As this definition lacked clarity, because it was not specified under which conditions that parameter was to be determined, claim 1 did not comply with the requirements of Article 84 EPC.
 - (b) D4, which represented a suitable starting point for assessing inventive step, described a curable composition comprising as essential components an organic polymer (A) with at least a reactive silyl group in the molecule and a polymer (B) being a

multifunctional hydrolyzable silane compound. According to paragraph [0046] this curable composition could be used as an elastic sealant, because the cured material showed rubber elasticity. Accordingly, this material had to have good creep and recovery properties. A polymer of tetraethoxysilane was disclosed in paragraph [0035] and examples 1 to 5 as preferred polymer (B). The preferred polymer (A) was a polyoxyalkylene polymer with at least one reactive silyl group, which preferably contained two or three alkoxy groups as described in paragraphs [0012], [0013], [0015] and [0016]. The mere selection of one of the preferred alternatives described in D4 for the reactive silyl group did not involve an inventive step. The experimental results submitted by the patent proprietor, which allegedly demonstrated that the use of trimethoxysilyl end groups brought about better recovery properties and creep resistance than end methyldimethoxysilyl groups, were not surprising and constituted for the skilled person a well-known phenomenon. Indeed, a higher number of cross-linking groups would inevitably lead to better recovery properties as was also shown in D5. The skilled person faced with the problem of improving recovery properties and creep resistance would definitely have relied on the systems disclosed in D4 for which the reactive silyl groups had three hydrolysable groups.

- (c) The specific use of the curable composition in a seam where the ratio of the displacement width to the average width is 15% or greater could not be taken into consideration for assessing inventive step and therefore could not justify the existence of an inventive step, because the parametric

definition of the seam in accordance with claim 1 could not constitute a distinguishing feature having regard to the unclear definition of the ratio of the displacement width to the average width being 15% or greater and to the fact that such values were not untypical as shown in D9. Moreover, the use in construction of seam materials on the basis of silane modified polymers was quite typical and could not justify an inventive step. Also the use of elastic adhesives and seam materials for motor vehicles was common practice as demonstrated by D10 (page 7, lines 1-3).

(d) Accordingly, the subject-matter of claim 1 lacked an inventive step.

X. As far as relevant to the present decision, the respondent's arguments can be summarised as follows:

(a) No clarity issue had been created which did not exist in the patent as granted. Accordingly, there was no basis for allowing a clarity objection into the proceedings. In any event variations of joint width in the construction area, for example due to variations of weather conditions or seismic activity, was a phenomenon well known in the art as shown in D9 and the skilled person was aware of the joint width extension which could be expected for a specific building.

(b) As to inventive step, the key problem addressed by D4, as set out in paragraphs [0003] and [0047], as well as in the working example, was to reduce fouling by surface staining/dust adhesion. Despite the mention of the terms "sealant" and "rubber elasticity" in paragraph [0046] of D4, there was no

indication that the material described in D4 should act as a bridge between two heavy substrates. Furthermore, as shown by D9 it was not true that amplitudes of displacement would generally exceed 15%. In fact the ratio of the displacement width to the average width of at least 15% was only observed in certain types of joints and materials. Moreover, the material used in D4 was not limited to polyoxyalkylenes, and contrary to the appellant's allegation, a person skilled in the art had no basis for considering that curable compositions comprising organic polymers with trifunctional silyl groups would show excellent recovery properties and creep resistance. This argument remained a mere assertion in the absence of evidence showing the knowledge of the skilled person in this respect. In addition the prior art cited did not suggest that the use of condensation products of tetraalkoxysilanes would lead to improved recovery properties and creep resistance as demonstrated with examples 8 and 10 of the patent in suit. In D5 the use of tetraalkoxysilanes was merely to improve the storage stability of silyl group-bearing organic polymers. An inventive step was therefore to be acknowledged.

- XI. The party as of right did not submit any argument and only requested a decision based on the content of the file.
- XII. The appellant requested that the decision under appeal be set aside and the patent be revoked.
- XIII. The respondent requested that the appeal be dismissed, or alternatively that the decision under appeal be set aside and the patent be maintained on the basis of any

of the first to seventh auxiliary requests, all submitted with letter of 22 January 2014.

Reasons for the Decision

Main Request

Clarity

1. The objection raised by the appellant relates to an alleged ambiguity of the parametric condition "*where the ratio of the displacement width to the average width is 15% or greater*" defined in claim 1. The wording of claim 1 is based on a combination of claims as granted, namely use claims 12 and 13 and product claim 1 to which they refer. This objection has been made in view of the reasoning held in decision T 0459/09, which however has been overruled by decision of the Enlarged Board of Appeal G 3/14 (OJ EPO 2015, 102). Since in present claim 1 the alleged lack of clarity would already have existed in claim 12 as granted and is not the result of the amendments made, claim 1 of the main request may not be examined for compliance with the requirements of Article 84 EPC with regard to the objection of the appellant.

Novelty

2. The objection that the subject-matter of claim 1 lacked novelty over D4 was not pursued on appeal. The Board has no reason to consider that novelty of the subject-matter of claim 1 must be denied.

Inventive step

3. The closest prior art for the purpose of assessing inventive step is that which corresponds to a purpose or effect similar to that of the invention and requiring the minimum of structural and functional modifications (see Case Law of the Boards of Appeal of the EPO, 8th edition, 2016, I.D.3.1). According to paragraph [0007] of the patent in suit, the purpose of the present invention is to provide a curable composition capable of giving a cured article excellent in recovery properties, durability and creep resistance. These properties obtained with the compositions defined in present claim 1, as illustrated with example 10 of the patent in suit, are required for sealants used for motor vehicle panels or for working joints in buildings with large joint variations (see paragraphs [0004] and [0005]) in accordance with the use defined in claim 1 of the main request.

4. D4 considered by the appellant as the closest prior art describes in claim 1 a curable composition comprising an organic polymer (A) having at least one reactive silyl group in the molecule and a polymer (B) of a multifunctional hydrolyzable silane compound. That material can be used as sealant (claim 2) or coating material (claim 3). It can be inferred from paragraphs [0017] and [0030] of D4 that the organic polymer (A) provides flexibility of the cured composition, whereas polymer (B) brings about antifouling properties (paragraph [0045]). According to paragraph [0046] it is preferable to use the curable composition as an elastic sealant because the cured material shows rubber elasticity. However, as indicated by the respondent, D4 does not describe that the sealants defined therein are excellent in recovery properties, durability and creep

resistance. No evidence has been cited which would demonstrate that said properties are necessarily implied by the wordings "rubber elasticity" and "flexibility" used in D4 to describe the sealant of that document or by the general uses described in that document, i.e. sealant or coating material. More importantly, D4 does not disclose that the sealants described therein are suitable for motor vehicle panels or working joints in buildings with large joint variations. Accordingly, D4 does not contain any indication, either explicit or implicit that the sealants described in D4 are most probably suitable for solving the problem mentioned in the patent in suit and does not concern the specific uses which are the object of claim 1 of the main request.

5. Consequently, D4 does not represent a realistic or suitable starting point for the skilled person dealing with the specific uses claimed and wishing to solve the problem mentioned in the patent in suit. In other words starting from D4 as the closest prior art can only be the result of an inadmissible ex post facto analysis which draws on knowledge of the structural features of the invention, i.e. on the specific uses claimed and on the solution proposed by the present invention. Accordingly, the objection submitted by the appellant, which starts from D4 as the closest prior art, fails to convince.
6. The appellant also did not show, let alone argue, that any of the other prior art documents cited in the proceedings, namely D1, D5, D9 and D10 could be taken as alternative closest prior art and would suggest that polyoxyalkylene polymer (A) as defined in claim 1 of the patent in suit would be capable of giving a cured article excellent in recovery properties, durability

and creep resistance or would be suitable for adhesives used for motor vehicle panels or sealants for working joints in buildings with large joint variations, let alone that the addition to that polymer of a condensate of tetraalkoxysilane would improve the sought properties as demonstrated by examples 8 and 10 of the granted patent.

7. Accordingly, the Board does not see any reason to overturn the decision of the opposition division on inventive step and the appeal is to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



B. ter Heijden

D. Semino

Decision electronically authenticated