Internal distribution code:

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

Datasheet for the decision of 3 February 2026

Case Number: T 0267/24 - 3.3.02

Application Number: 16707504.3

Publication Number: 3250244

IPC: A61L15/28

Language of the proceedings: EN

Title of invention:
COMPOSITION FOR A WOUND DRESSING

Patent Proprietor:
Medtrade Products Limited

Opponent:
ConvaTec Limited

Headword:

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (yes) - unexpected improvement shown

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

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

Case Number: T 0267/24 - 3.3.02

D E C I S I O N
of Technical Board of Appeal 3.3.02
of 3 February 2026

Appellant: (Patent Proprietor)	Medtrade Products Limited Electra House Crewe Business Park Crewe, Cheshire CW1 6GL (GB)
Representative:	Wilson Gunn Centurion House 129 Deansgate Manchester M3 3WR (GB)
Respondent: (Opponent)	ConvaTec Limited GDC, First Avenue Deeside Industrial Park Deeside Flintshire CH5 2NU (GB)
Representative:	D Young & Co LLP 3 Noble Street London EC2V 7BQ (GB)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted/electronically transmitted on 22 December 2023 revoking European patent No. 3250244 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	M. O. Müller
Members:	M. Kollmannsberger
	R. Romandini

Summary of Facts and Submissions

I. The patent proprietor (in the following: appellant) appealed the opposition division's decision to revoke the patent in amended form under Article 101(3)(b) EPC.

II. The patent deals with compositions able to disrupt or prevent biofilm formation and having an antimicrobial effect on microorganisms inside the biofilm, see paragraph [0013]. Such compositions may be used in the treatment of wounds or to prevent the formation of biofilms on non-living surfaces.

III. The following documents are referred to in the present decision:

D3: Carlson et al., Journal of Biomaterials Science, Polymer Edition (2008), 19(8), 1035-1046

D12: Lieleg et al., Soft Matter (2011), 7(7), 3307-3314

D15: Test data, "MT25 Biofilm Solubilising Patent biofilm disrupt and kill data on different solubilizing and triprotic acids", Report No P1937R filed 27 September 2022

D16: Test data, "MT25 Biofilm Solubilising Patent biofilm disrupt and kill data on different solubilizing and triprotic acids", Report No P1938R, filed 27 September 2022

D21: Zhongyue Qin et al., Journal of Applied Polymer Science, Vol. 117, 1843-1850 (2010)

D22: Atef El-Sayed et al., Indian Journal of Fibre & Textile Research, Vol. 40, 25-30 (2015)

D23: Test data "MT25 Biofilm Testing", filed 22 April 2024

D24: Rembe et al., Frontiers in Microbiology, Vol. 11, Article 564513 (2020)

D25: Test data "MT25 Biofilm Solubilising Patent biofilm disrupt and kill data on different chitosan derivatives", Report No P2312R, filed 22 April 2024

D26: Test data "MT25 Biofilm Solubilising Patent biofilm disrupt and kill data on different chitosan derivatives", Report No P2313R, filed 22 April 2024

IV. The patent was opposed under Articles 100(a) and 100(b) EPC for lack of novelty (Article 54 EPC), lack of inventive step (Article 56 EPC) and insufficient disclosure (Article 83 EPC).

V. In opposition proceedings the appellant, then patent proprietor, defended the patent in the form of an amended claim set as main request and nine auxiliary requests. In its decision the opposition division held that none of these claim sets was allowable since the compositions defined in the independent claims of all of them lacked an inventive step over D3 as closest state of the art, Article 56 EPC. The opponent's objections of lack of novelty (Article 54 EPC) and insufficient disclosure (Article 83 EPC) were dismissed. The opposition division likewise considered the claims of the appellant's main request not to contain subject-matter extending beyond the application as originally filed, Article 123(2) EPC; no detailed

assessment was made for the claims of the auxiliary requests.

VI. At the end of the appeal proceedings the appellant, as its new main request, defended the patent in restricted form based on a claim set which had been filed as auxiliary request 3 with the statement setting out the grounds of appeal. This claim set corresponds to auxiliary request 6 underlying the decision under appeal.

VII. The independent claims of the appellant's new main request read as follows:

Claim 1:
"*A composition comprising a first component selected from the group consisting of chitosan, derivatives of chitosan, and any combination thereof, the chitosan derivate being selected from the group consisting of N-acyl chitosan, O-acyl chitosan, N-alkyl chitosan and O-alkyl chitosan; at least one triprotic acid and at least one solubilising acid, wherein the triprotic acid is present in an amount of at least 10% of the first component, and wherein the solubilising acid is a monoprotic acid, and wherein the composition does not comprise a hydrolase enzyme*".

Claim 10:
"*A wound dressing comprising a composition as claimed in any preceding claim.*"

Claim 11:
"*A composition as claimed in any of claims 1-9 for use as a therapeutic agent.*"

Claim 12:
"*A composition as claimed in any of claims 1-9 for use in the treatment of wounds.*"

Claim 13:
"*A method of manufacturing a composition comprising a first component selected from the group consisting of chitosan, derivatives of chitosan, and combinations thereof, the chitosan derivate being selected from the group consisting of N-acyl chitosan, O-acyl chitosan, N-alkyl chitosan and O-alkyl chitosan; at least one triprotic acid and at least one solubilising acid, wherein the triprotic acid is present in an amount of at least 10% of the first component, and wherein the solubilising acid is a monoprotic acid, and wherein the composition does not comprise a hydrolase enzyme, the method comprising the steps of:*

a. coating at least a portion of the first component with a mixture comprising the at least one triprotic acid and the at least one solubilising acid; and/or

b. absorbing into at least a portion of the first component a mixture comprising the at least one triprotic acid and the at least one solubilising acid."

Claim 14:
"*A composition as claimed in any of claims 1-9 for use in disrupting and killing bacteria in a biofilm on a non-living surface; or for use in preventing the formation of a biofilm on a non-living surface.*"

VIII. In its statement setting out the grounds of appeal and in the further appeal proceedings the appellant submitted that, in contrast to the finding of the

opposition division, the claims of this request defined inventive subject-matter. In particular, the opposition division should have acknowledged that, as proven by the experimental data on file, the triprotic acid, the chitosan (derivative) and the monoprotic acid acted together in a synergistic way with respect to antibacterial efficacy. Such a behaviour was not rendered obvious by the cited prior art documents.

IX. The respondent (opponent) submitted that it would not participate in the appeal proceedings. It did not file any arguments nor did it make any procedural or substantive requests.

X. Oral proceedings were held on 3 February 2026 in the presence of the appellant. The respondent did not attend.

XI. The final requests of the appellant were the following:

It requested that the decision under appeal be set aside and that the patent be maintained in amended form, Article 101(3)(a) EPC, on the basis of the new main request, filed as auxiliary request 3 with the statement of grounds of appeal, or on the basis of auxiliary requests 1, filed as auxiliary request 4 with the statement of grounds of appeal.

Furthermore, the appellant requested that documents D21-D26 be admitted into appeal proceedings.

XII. The decision was announced at the end of the oral proceedings.

Reasons for the Decision

1. Admittance of newly filed documents to appeal proceedings

1.1 D21 and D22 were filed with the statement setting out the grounds of appeal and are thus an amendment to the appellant's appeal case in the sense of Article 12(4) RPBA. These documents were filed in order to show that untreated viscose does not have any antibacterial effect. This is relevant to the question of whether samples G, J and P in the patent, of which only sample P contains viscose, are comparable. The appellant argued that this question was raised for the first time during oral proceedings before the opposition division; therefore, there was no possibility to file corresponding evidence during the opposition procedure.

In view of the fact that the question related to viscose was neither raised by the respondent in the written phase of the opposition proceedings nor addressed in the opposition division's preliminary opinion annexed to the summons for oral proceedings the Board finds the appellant's reasoning convincing. It therefore exercises its discretion under Article 12(4) RPBA to admit D21 and D22 into appeal proceedings.

1.2 D23 and D24

D23 and D24, filed by the appellant, contain further experimental test data and were filed with the statement setting out the grounds of appeal.

Their content is not necessary for the present decision, which is in the appellant's favour so no decision on admittance needs to be given.

1.3 D25 and D26

D25 and D26 were likewise filed with the appellant's statement setting out the grounds of appeal. The data compiled in these test reports was already presented in the text of the appellant's submission dated 6 October 2023, in opposition proceedings, and is referred to in point II.1.6.2 of the decision under appeal. Thus, the Board accepts the appellant's argument that these documents do not contain any new evidence. Their content was already part of the opposition proceedings and is part of the appeal proceedings in view of Article 12(2) RPBA.

The appellant's new main request

2. Inventive step, Article 56 EPC

2.1 The patent deals with compositions able to disrupt or prevent biofilm formation and having an antimicrobial effect on microorganisms inside the biofilm, see paragraph [0013]. Such compositions may be used in the treatment of wounds or to prevent the formation of biofilms on non-living surfaces.

2.2 Closest state of the art

2.2.1 Claim 1 contains two alternatives for the first component, namely chitosan or chitosan derivatives. The first will be denoted hereinafter the chitosan

alternative, the second the chitosan derivative alternative.

2.2.2 The appellant does not dispute the opposition division's choice of D3 as closest prior art document and the board sees no reason to divert from this view.

2.2.3 D3 discloses that chitosan is effective in the prevention of biofilm formation when coated on surfaces, see e. g. the chapter "conclusions". The test surfaces were prepared using a 1% (v/v) chitosan solution in 1% (v/v) glacial acetic acid, see page 1038, last paragraph. Acetic acid is a solubilizing and monoprotic acid as required by claim 1. Tests were carried out i. a. using a *Pseudomonas aeruginosa* bacterial strain.

2.2.4 Thus, the chitosan alternative of claim 1 differs from the disclosure of D3 in that the claimed composition contains at least one triprotic acid in an amount of at least 10% of the first component, i. e. the chitosan. This was likewise undisputed.

2.2.5 The board notes that the disclosure of D3 is restricted to chitosan. No acylated or alkylated chitosan derivatives as defined for the chitosan derivative alternative in claim 1 are disclosed. Thus, the chitosan derivative alternative of claim 1 differs from the disclosure of D3 in addition in the nature of the chitosan component.

2.3 Objective technical problem to be solved

2.3.1 The opposition division concluded that the addition of the triprotic acid did not lead to any particular technical effect over D3 other than to a predictable

increase in antimicrobial efficacy due to the higher concentration of acid, see point II.1.6.2 of the decision. Moreover, any possible improvement was shown only with respect to individual compositions, containing chitosan as a first component, so that such improvements could not be extrapolated to the whole of claim 1 of the then pending main request. Even for compositions containing chitosan as first component unexpected synergistic effects had not been proven since the comparative data contained in the patent were not valid. Following point II.3 of the decision these consideration likewise apply to the new main request in appeal proceedings, which corresponds to auxiliary request 6 underlying the decision. The opposition division thus formulated the objective technical problem to be solved starting from D3 as the provision of an "alternative composition", see page 17, end of the paragraph.

2.3.2 The appellant argued that from a comparison of samples P (chitosan/lactic acid), J (chitosan/citric acid) and G (chitosan/citric acid/lactic acid, as required by claim 1) in the patent it could be derived that the addition of citric acid to the compositions containing chitosan and the monoprotic acid (here: lactic acid) resulted in a synergistic, i. e. more than just additive, effect, see figures 4-7 of the patent. In particular, compared to a control composition, a composition containing chitosan and a monoprotic acid (lactic acid, sample P) alone lead to a logarithmic reduction of the number of recoverable bacteria from a biofilm by one unit, a composition containing chitosan and a triprotic acid (citric acid, sample J) alone had no measurable effect, while a composition containing chitosan as well as a monoprotic and a triprotic acid

(sample G) lead to a logarithmic reduction by six units.

2.3.3 The Board agrees with this argument, at least as far as the chitosan alternative of claim 1 is concerned.

The opposition division did not accept the comparison between samples P, G and J reasoning that these samples did not only differ in terms of the distinguishing feature. Specifically sample P used a base fabric made of chitosan/viscose, instead of chitosan alone, like the other two samples.

This is not convincing. It is commonly known that untreated viscose, a regenerated form of cellulose chemically identical to cellulose, has no antibacterial effect as such. The opposition division considered this to be an unsubstantiated assertion. However, the appellant has pointed to various documents describing the chemical modification of viscose in order to make it bacteriostatic, since viscose alone does not have antibacterial properties. D21 describes that bamboo pulp, a cellulose that may be spun into viscose, has no antibacterial properties (see introductory part); such effects may be obtained by additives such as metal salts. Likewise, also D22 stresses the need for modification of viscose in case antibacterial properties are necessary, see abstract and the table on page 29. Thus, the board is convinced that the viscose contained in the substrate of sample P in the patent does not have any influence on the conclusion drawn in the patent.

The board sees no reason why the results obtained using citric acid as a triprotic acid and lactic acid as a monoprotic acid could not be transferred to chitosan

containing compositions using other types of triprotic and monoprotic acids. The experimental data compiled in D15 and D16 show that various monoprotic and triprotic acids, including lactic and citric acid, lead to similar antibacterial effects when used in combination with chitosan.

Thus, the board considers it as established that monoprotic and triprotic acids act together in a synergistic way when used together with chitosan in compositions according to claim 1. Antibacterial efficacy is enhanced much more than what could be expected from the contribution of the individual components.

2.3.4 Regarding the chitosan derivative alternative of claim 1 the opposition division considered that, since compositions containing such derivatives as first components were not tested, no synergistic effect could be acknowledged. This conclusion was likewise contested by the appellant.

The board notes that experimental data showing antibacterial efficacy of various chitosan derivatives according to claim 1 is on file, see D25 and D26. However, the tested compositions neither contain monoprotic nor triprotic acids so that a synergistic effect of such acids when used together with the chitosan derivatives has not been established. As synergy is generally unpredictable, the results obtained from chitosan may not be generalized to the derivatives listed in claim 1.

2.3.5 Thus, the objective technical problem must be split in two.

For the chitosan alternative of claim 1, this problem is the provision of compositions which provide a synergistically improved antibacterial effect and are active in biofilm prevention or biofilm disruption.

For the chitosan derivative alternative of claim 1, this problem is the provision of alternative compositions which provide an antibacterial effect, and are active in biofilm prevention or biofilm disruption.

In the first case the claimed solution to the problem is to add a triprotic acid to the compositions known from D3.

In the second case the claimed solution to the problem is to replace chitosan in the compositions known from D3 with one of the listed derivatives and add a triprotic acid

2.4 Obviousness of the claimed solution

2.4.1 The opposition division reasoned that a skilled person would have added triprotic acids in the expectation of further improving the antibacterial efficacy based on the teaching of D12, see point II.1.6.3 of the decision under appeal.

D12 investigates the effect of various agents on the disruption of pre-formed biofilms, i. a. of *Pseudomonas aeruginosa* and concludes that citric acid is effective in fluidizing such films and has an antimicrobial effect on bacteria inside the film, see page 5, last passage before "*materials and methods*".

2.4.2 Chitosan alternative of claim 1

The board agrees to the opposition division's reasoning insofar as a skilled person, when considering the teaching of D12, may have indeed considered that starting from D3 at least some increase in biofilm antibacterial activity could be obtained when adding a triprotic acid to the compositions disclosed therein.

However, as set out above, the objective technical problem is not just the provision of compositions which provide some improvement in antibacterial effect. The objective technical problem is the provision of compositions which provide a synergistically improved antibacterial effect. The skilled person would not have expected that the triprotic acid acted together in a synergistic way with the other components so as to improve antibacterial efficacy by several orders of magnitudes. Such synergistic behaviour is unpredictable. In the absence of any hint in the cited prior art on how to achieve such an effect the addition of a triprotic acid for this purpose was not obvious for the skilled person.

2.4.3 Chitosan derivative alternative of claim 1

D3 does not mention any chitosan derivatives, let alone antibacterial effects thereof. Thus, even if the teaching of D12 may have prompted the skilled person to add a triprotic acid to the compositions disclosed in D3, they would not have arrived at the claimed chitosan derivative alternative. Thus, the provision of antibacterial compositions containing these chitosan derivatives, monoprotic acids and triprotic acids was not obvious for the person skilled in the art.

2.5 Therefore, the compositions defined in claim 1 involve and inventive step in the sense of Article 56 EPC.

2.6 Since the compositions according to claim 1 are inventive, also the provision of a wound dressing containing them is inventive (claim 10). The same holds for the first and second medical use claims 11 and 12, the preparation of the compositions (claim 13) and the composition-for-use claim 14 and any dependent claim.

2.7 Thus, the claims of the new main request fulfil Article 56 EPC.

3. Further objections raised during opposition proceedings

3.1 The objections raised under Article 54 EPC (lack of novelty) and under Article 83 EPC (insufficient disclosure) were dismissed by the opposition division for the then pending main request, see points II.1.4 and II.1.5 of the decision under appeal. These findings apply also to the new main request in appeal proceedings, which was auxiliary request 6 underlying the decision under appeal.

The findings of the opposition division were not contested in appeal proceedings. The board in turn does not see any reason to deviate therefrom.

Thus, the claims of the appellant's new main request comply with the requirements of Articles 54 and 83 EPC.

3.2 The objections raised under Article 123(2) EPC (unallowable amendments) against claims 1 and 14 of the main request in opposition proceedings were dismissed by the opposition division, see point II.1.2 of the

decision under appeal. These findings are uncontested in appeal proceedings.

The additional amendments in the new main request concern the restriction of the first component of the compositions to chitosan and certain chitosan derivatives in independent claims 1 and 13, the deletion of some dependent claims and the splitting of the composition-for-use claim into two claims 12 and 14.

These amendments do not add any originally undisclosed subject-matter and comply thus with Article 123(2) EPC. In the definition of the first component chitin is omitted. Furthermore, the chitosan derivatives have been specified according to the definition on page 6 lines 33 to 34 of the published PCT-application. The deletion of dependent claims cannot add originally undisclosed subject-matter and the splitting of the composition-for-use claim does not change the subject-matter claimed.

4. Amended description

The appellant has filed an amended description reflecting the amendments carried out in the claims of the new main request during opposition and appeal proceedings. The amended claims are supported by the amended description. Thus, the amended claims comply with Article 84 EPC.

5. To summarize, taking into consideration the amendments to the patent made, the patent, in form of the claims of the new main request as filed with the appellant's

statement of grounds of appeal and the description adapted thereto, and the invention to which it relates comply with the relevant provisions of the EPC. The appellant's request for maintenance of the patent under Article 101(3)(a) EPC based on its new main request is thus allowed. The appellant's auxiliary request does not need to be considered.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent on the basis of the following documents:

- Claims 1–14 of the new main request filed as auxiliary request 3 with the statement of grounds of appeal;

- Description consisting of the following pages:

replacement Page 1
page 3 of the patent
replacement Page 4
pages 5–7 of the patent
replacement pages 8 and 8a
pages 9–15 of the patent,

the replacement pages having been filed at the oral proceedings before the Board on 3 February 2026;

- Figures 1-12 of the patent.

The Registrar: The Chairman:

A. Wille M. O. Müller

Decision electronically authenticated