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**Datasheet for the decision
of 20 July 2021**

Case Number: T 2090/15 - 3.3.02

Application Number: 10171303.0

Publication Number: 2290041

IPC: C10M133/56, C10N30/10,
C10N30/12, C10N40/25,
C10N40/26, C10N70/00, C10N60/14

Language of the proceedings: EN

Title of invention:
Use of an ashless borated dispersant

Patent Proprietor:
Infineum International Limited

Opponent:
New Market Services Corporation

Headword:

Relevant legal provisions:
EPC Art. 54

Keyword:
Novelty of use - main and auxiliary requests (no)

Decisions cited:

G 0002/88, T 0231/85, T 0059/87, T 0892/94, T 0717/98,
T 1269/01, T 0729/05, T 0816/05, T 1539/14

Catchword:

Novelty of non-medical use claims: the mere discovery of a new property or capability of a particular ingredient of a known composition used for a known purpose cannot confer novelty (reasons, 1.3)



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Case Number: T 2090/15 - 3.3.02

D E C I S I O N
of Technical Board of Appeal 3.3.02
of 20 July 2021

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 3 September
2015 rejecting the opposition filed against
European patent No. 2290041 pursuant to Article
101(2) EPC.**

Composition of the Board:

Chairman M. O. Müller
Members: P. O'Sullivan
 P. de Heij

Summary of Facts and Submissions

- I. The appeal of the opponent (hereinafter appellant) lies from the decision of the opposition division to reject the opposition against European patent 2 290 041.
- II. The patent was opposed based on the grounds for opposition pursuant to Article 100(a) (novelty and inventive step) and 100(b) EPC.
- III. During the appeal proceedings, reference was made *inter alia* to the following prior art documents:
- | | |
|-----|-------------------|
| D3a | WO 2009/101933 A1 |
| D3b | EP 2 248 876 A1 |
- IV. With a communication pursuant to Article 15(1) RPBA, the board set out its preliminary opinion.
- V. Oral proceedings by videoconference were held on 20 July 2021 in the presence of both parties.
- VI. Requests relevant to the present decision

The appellant requested that the decision under appeal be set aside and that the patent be revoked in its entirety.

The respondent requested that the appeal be rejected, i.e. that the patent be maintained as granted, or alternatively that the patent be maintained on the basis of one of the sets of claims of the first to seventh auxiliary requests (also denoted auxiliary requests A to G), all filed with the reply to the statement of grounds of appeal.

VII. Independent claim 1 of the main request reads as follows:

"1. The use, in the lubrication of a compression-ignited internal combustion engine which is fuelled with bio-diesel, of an oil-soluble boron containing compound comprising an ashless borated dispersant, as an additive component in a minor amount, in a lubricating oil composition, to reduce and/or inhibit the corrosion of the metallic engine components, during operation of the engine, wherein the boron containing compound introduces greater than 100 to less than 10000 ppm of boron into the lubricating oil composition, based on the total mass of the lubricating oil composition, and the lubricating oil composition becomes contaminated with bio-diesel or a decomposition product thereof during operation of the engine."

VIII. The arguments of the appellant insofar as relevant to the present decision, may be summarised as follows:

Main request - Articles 100(a) and 54 EPC

The subject-matter of claim 1 lacked novelty over D3. D3 disclosed the use of a lubricating oil composition for reducing corrosion of engine parts when biofuel or biofuel-mixed fuel is used in an internal combustion engine. All examples of D3 comprised an ashless borated dispersant as required by claim 1, in an amount covered by claim 1. The only difference between claim 1 and the disclosure in D3 was the attribution to the ashless borated dispersant of claim 1 of the known technical effect of corrosion control within the known means of realisation (use as an engine lubricant in a compression-ignited internal combustion engine which is

fueled with biodiesel, wherein the lubricating oil becomes contaminated with biodiesel or a decomposition product thereof during operation). Contrary to the situation underlying G 2/88 and related case law, the contested patent did not provide a new means of realisation by which the new purpose was achieved. Rather, the means of realisation was exactly the same as that disclosed in D3. The distinction in attributing corrosion control to ashless borated dispersants had no physical realisation and lay solely in the mind of the person carrying out the invention. Such a new use did not define a technical feature of the claim according to G 2/88, and it was no longer necessary to examine whether the feature was made available in the prior art or not. Claim 1 therefore lacked novelty.

Auxiliary requests - Article 54 EPC

The additional features added to the respective claim 1 of each of the auxiliary requests were already disclosed in D3 in combination with the features of claim 1 of the main request, namely, in the examples thereof.

IX. The arguments of the respondent insofar as relevant to the present decision, may be summarised as follows:

Main request - Articles 100(a) and 54 EPC

Claim 1 was to be interpreted as directed to the use of a boron compound, as an additive component, and not to the use of a finished lubricant formulation containing many different additives, to achieve the effect specified. Since the situation in the present case was similar to that underlying G 2/88, novelty was to be acknowledged for the same reason. Specifically, in

G 2/88, a claim to the use of a compound for reducing friction in a lubricant was held novel over a prior art disclosure of the same compound in a lubricant for inhibiting rust. In the present case, the claim was directed to the use of a compound for inhibiting corrosion in a lubricant, against a prior art disclosure of the same compound in a lubricant for reducing friction. In order to destroy novelty therefore, D3 must *inter alia* make available to the public the information that the ashless borated dispersant is used for the functional technical effect of reducing and/or inhibiting corrosion in a biodiesel-contaminated lubricant. Since D3 did not disclose said technical effect, novelty was to be acknowledged.

Auxiliary requests - Article 54 EPC

The respective claim 1 of the auxiliary requests comprised further limiting features compared to claim 1 as granted. Only if all of the features of the claim were disclosed in D3 in combination with each other could novelty be denied.

Reasons for the Decision

Main request

1. Novelty - Articles 100(a) and 54 EPC

1.1 Background

The appellant submitted that the subject-matter of claim 1 lacked novelty over D3a. D3a is prior art under Article 54(2) EPC. Since D3a was published in Japanese,

the parties referred to D3b, published in English on 10 November 2010, and thus after the filing date of the patent, as corresponding to the disclosure of D3a. This was not disputed by either party. On this basis, reference to "D3" hereinafter refers to the text of D3b.

1.2 Interpretation - claim 1

1.2.1 Claim 1, in summary, concerns the use:

- in the lubrication of a compression-ignited internal combustion engine...
- of an oil-soluble boron containing compound comprising an ashless borated dispersant ... as an additive component in a minor amount, in a lubricating oil composition,
- to reduce and/or inhibit the corrosion of the metallic engine components, during operation of the engine..."

For ease of reference in the following, the "oil-soluble boron containing compound comprising an ashless borated dispersant" recited in this claim is abbreviated to "the boron compound". The feature related to the reduction or inhibition of corrosion is abbreviated to "reduction of corrosion" or the corresponding verbal construction "to reduce corrosion".

1.2.2 It was the respondent's view that when correctly interpreted, claim 1 was to be understood as being directed to the use of the boron compound, as an additive component, and not to the use of a composition

containing many different additives including said boron compound. Hence, the claimed use was limited to the use of exclusively the boron compound for the claimed technical effect.

1.2.3 The board disagrees with this interpretation. Claim 1 is directed to the use (of something) to achieve an effect, namely the reduction of corrosion. While the wording of claim 1 indeed implies that the boron compound plays the role of providing said effect (i.e. it has corrosion-reducing properties), it is not the boron compound alone which is used to achieve said effect. Rather, the claim explicitly states that the boron compound is used as "an additive compound in a minor amount, in a lubricating oil composition". Thus, the "major amount" according to the claim is provided by the further ingredients of the lubricating oil composition. Indeed, it was not disputed by the respondent that in carrying out the activity defined by claim 1, the boron compound is used in a lubricating oil composition to achieve the desired effect.

1.2.4 The use defined in claim 1 therefore comprises employing a lubricating oil composition comprising *inter alia* the boron compound to reduce corrosion, whereby the boron compound plays a role in said reduction.

1.3 Novelty vis à vis D3

1.3.1 D3 is a patent document disclosing a lubricating oil composition for use in an internal combustion engine that uses fuel originating from natural fat and oil (paragraph [0001]). The object of the invention of D3 is to reduce corrosion in engine parts when such a biofuel or biofuel-mixed fuel is used, e.g. in a diesel

engine (paragraph [0004], lines 46-47). Considerable reduction in the corrosion of engine parts is achieved by including in the lubricant composition a specific amount of a sulphur compound comprising a -C-S-C- bond (paragraph [0021]; claim 1). According to paragraph [0028], other additives, including an ashless-type friction modifier, may be added as necessary to the composition. Examples of ashless-type friction modifiers include a mono-type or bis-type polybutenyl succinimide and/or a boride thereof (paragraph [0031]). The lubricant compositions of all examples and comparative examples include "polybutenyl succinic monoimide A", having a boron content of 1.3 mass% (paragraph [0039], entry 5; table 1).

- 1.3.2 It is undisputed that the "polybutenyl succinic monoimide A" in the lubricant compositions of all examples and comparative examples in D3 (table 1) corresponds to the boron compound recited in claim 1, and that it is present in the compositions of D3 in an amount within the range recited in claim 1, namely that it *"introduces greater than 100 to less than 10000 ppm of boron into the lubricating oil composition, based on the total mass of the lubricating oil composition"*.

It is also undisputed that the use (i.e. the purpose) of the compositions of D3 corresponds to the use recited in claim 1, namely *"to reduce and/or inhibit the corrosion of the metallic engine components during operation of the engine ... and the lubricating oil composition becomes contaminated with bio-diesel or a decomposition product thereof during operation of the engine"*. Furthermore, it is undisputed that the *means of realisation* of the use disclosed for the lubricant compositions of D3 is the same as that disclosed for the compositions of claim 1, namely adding the

lubricating oil composition to a compression-ignited internal combustion engine which is fueled with biodiesel, and running the engine while reducing corrosion (whereby the oil composition becomes contaminated with a biodiesel or a decomposition product thereof as recited in present claim 1).

Finally, it is also undisputed that D3 fails to disclose that "polybutenyl succinic monoimide A", i.e. the boron compound disclosed in the examples thereof, acts to reduce corrosion in the composition of D3. Rather, as stated above, it is said to act as a friction modifier (D3, paragraphs [0028] and [0031]).

- 1.3.3 In view of this, it must therefore be assessed whether the subject-matter of the use defined in claim 1 can be considered novel over D3.

The respondent defended novelty by drawing parallels between the present case and the case underlying Enlarged Board of Appeal decision G 2/88 (OJ EPO, 1990, 93). In G 2/88, a claim to the use of a compound for reducing friction in a lubricant was held novel over a prior art disclosure of the same compound in a lubricant for inhibiting rust (in fact it was the board in the referring case T 59/87 that came to this conclusion on the basis of the Enlarged Board's decision in G 2/88). According to the respondent, in the present case, claim 1 was directed to the use of a compound for inhibiting corrosion in a lubricant, against a prior art disclosure of the same compound in a lubricant for reducing friction. Since novelty was acknowledged in G 2/88, the same should apply to subject-matter of claim 1.

1.3.4 In the view of the board, the respondent's comparison of the facts in G 2/88 to those of the present case is flawed for the following reasons. In G 2/88 the Enlarged Board of Appeal acknowledged novelty for the use of a known compound in a known means of realisation to achieve a new technical effect, even if that effect had been the inherent result of using the known compound in the known means of realisation. However, as set out above, present claim 1 is to be interpreted as including the use of a composition for reducing corrosion, the composition comprising the boron compound as an additive in a minor amount. The corresponding composition in D3 is that of the examples and comparative examples, which undisputedly corresponds to the composition of present claim 1 and furthermore is undisputedly employed for the same use as that underlying present claim 1, namely the reduction of corrosion. Therefore, although as set out above, the boron compound in the composition of D3 is assigned a different role in said composition, namely as a friction modifier, the *purpose* of the composition disclosed in D3 is not friction modification but rather the same as that of the composition of present claim 1, namely the reduction of corrosion. Therefore, the present case is distinguished from the situation in G 2/88 because the same composition is used in the same way to achieve the same technical effect as the composition of the prior art. The respondent erroneously equates the purpose of the use according to D3 with the stated technical purpose of employing the boron compounds disclosed therein, namely for friction modification. However, this does not correspond to the actual purpose of the compositions in D3, as set out above.

1.3.5 More specifically, G 2/88 (reasons, 7) sets out *inter alia* the following:

"A claimed invention lacks novelty unless it includes **at least one essential technical feature which distinguishes it from the state of the art.** When deciding upon the novelty of a claim, a basic initial consideration is therefore to construe the claim in order to determine its technical features." (emphasis added by the present board)

To identify whether a claim comprised such a technical feature, the Enlarged Board continued (reasons, 7.1):

"In relation to a claim to **a use of a known entity for a new purpose**, the question initially arises: what are the technical features of the claim?" (emphasis added by the present board)

This introductory statement already clarifies that G 2/88 is not relevant to the present case. As established above, the *entity* in claim 1 is a lubricant oil composition comprising the boron compound. It has already been established that this entity (the composition) is disclosed in D3. It has also already been established above that the *purpose* of this entity, to reduce corrosion, is identical in both claim 1 and D3. Thus, claim 1 does not concern the use of a known entity for a new purpose.

The Enlarged Board in G2/88 concluded (reasons, 10.3):

"The answer to question (iii) may therefore be summarised as follows: with respect to a claim to a new use of a known compound, such new use may reflect a newly discovered technical effect described in the

patent. The attaining of such a technical effect should then be considered as a functional technical feature of the claim (e.g. the achievement in a particular context of that technical effect). **If that technical feature has not been previously made available to the public by any of the means as set out in Article 54(2) EPC, then the claimed invention is novel**, even though such technical effect may have inherently taken place in the course of carrying out what has previously been made available to the public." (emphasis added by the present board)

It was on this basis that the board in T 59/87 (which led to the referral in G 2/88) held that a claim to the use of a compound for reducing friction in a lubricant was novel over a prior art disclosure of the same compound in a lubricant for inhibiting rust (reasons, 2.4): the attainment of the new effect, the reduction of friction, was considered as a functional technical feature of the claim. Since it was not known from the prior art, which disclosed rust inhibition, that the compound could be used to achieve the effect of friction reduction, it conferred novelty on the claim. Different from that case, claim 1 in the present case concerns the use of the lubricating oil composition, not the boron compound, for the same use as that disclosed in the prior art.

Similarly, in T 231/85 (reasons, 6), cited in G 2/88 (reasons, 9.1) and invoked in the present case, the use of certain substances for influencing plant growth was known in the state of the art. Based on the newly discovered fungicidal effect of the same substances, claims directed to the use of these substances for the hitherto unknown, new purpose of controlling fungi and

preventive fungus control were held to be novel on the basis of the same principles.

- 1.3.6 A similar situation is apparent in further decisions cited by the respondent to support its position, as set out in the following.

In T 717/98, the established jurisprudence in G 2/88 was addressed, namely that in a second or further non-medical use of a known compound for achieving a technical effect, the attainment of such a technical effect had to be considered a functional technical feature of the claim. A claim was thus to be regarded as being novel if this functional technical feature had not been previously made available to the public by any of the means set out in Article 54(2) EPC (T 717/98, reasons 2.2). Claim 1 underlying the case concerned the use of a known substance (MMT) for producing a reduction of the reactivity of tailpipe exhaust products, which was considered by the board to be a different technical effect from that obtained by the use described in the prior art, which was the quantitative reduction of polluting emissions. It was therefore not the case that this technical feature just contributed to or explained the known effect obtained by the known use of the prior art, as was considered in decisions T 254/93 and T 892/94, and novelty was acknowledged (reasons, 2.4).

In T 816/05 invoked by the respondent, novelty over the prior art was acknowledged on the basis that the claimed use translated into a new technical application distinct from the known application (reasons, 17).

In T 729/05, the board acknowledged novelty on the basis that the use was not disclosed in the prior art,

and the technical effect underlying the use was considered as a new functional technical feature (reasons, 2.8).

- 1.3.7 The board endorses the aforementioned conclusions in each of the above decisions. The factual situation in those cases however contrasts with that of the present case, which concerns a claim directed to the use of a known composition (the lubricant composition of D3), containing a known substance (the boron compound of D3), for a known purpose (reduction of corrosion, the purpose for which the composition of D3 is used). Although D3 is silent about the role of the boron compound in reducing corrosion, it is nevertheless used in D3 in a composition intended for the same purpose and in the same means of realisation as in present claim 1. The implied recognition in claim 1 that the boron compound contributes to a reduction of corrosion represents nothing more than a newly discovered property or capability underlying the claimed effect or purpose. There is consequently no "new effect" on the basis of which claim 1 may be considered to comprise a functional technical feature distinct from that disclosed in the prior art D3.

Hence it is apparent on a comparison of present claim 1 with the disclosure in D3 that the only aspect of claim 1 which has not been made available to the public in D3 is the explanation, or discovery that the boron compound has the capability of reducing corrosion as recited in claim 1.

However, the mere discovery of a new property or capability of a particular ingredient of a known composition used for a known purpose cannot confer novelty on claim 1. In line with G 2/88 as set out

above, novelty can only be acknowledged if the newly discovered property or capability was applied in a new use which can be clearly distinguished from the old use. In the present case, the new and the old uses of the lubricating oil composition are the same, namely the reduction of corrosion.

For these reasons, the board concludes that the subject-matter of claim 1 lacks novelty over D3.

1.3.8 This conclusion is confirmed by further decisions cited by the parties:

In T 892/94 (reasons, 3.4, final two paragraphs), cited by the appellant in its arguments, it was stated:

"It follows from decision G 2/88 and the examples mentioned above that novelty within the meaning of Article 54(1) can be acknowledged in cases where the discovery of a new technical effect of a known substance leads to an invention which is defined in the claim in terms of the use of that substance for a hitherto unknown, new non-medical purpose reflecting said effect (ie a new functional technical feature), even if the only novel feature in that claim is the purpose for which the substance is used.

*Conversely, it can be inferred from decision G 2/88 that **no novelty exists, if the claim in question is directed to the use of a known substance for a known non-medical purpose, even if a newly discovered technical effect underlying said known use is indicated in the claim.*** (emphasis added by the present board)

On that basis, novelty was denied. This is analogous to the present case in which the corrosion-reducing

property of the boron compound underlies the claimed use of the lubricating oil composition for corrosion reduction.

Similarly, novelty was denied by the board in T 1269/01. The claim in question concerned the use of a known composition comprising citric acid (said to contribute to a known effect) for a known use (stabilisation upon storage). The board stated (reasons, 2.1.4, second paragraph):

"The fact the citric acid has been found in the patent in suit to contribute also to this effect cannot amount therefore to a new technical feature within the meaning of G 2/88 and 6/88 since the alleged new technical effect underlies that already disclosed in document (4), i.e. that of improved stability of the enzyme upon storage."

Rather than supporting the respondent's position, the case underlying this decision is analogous to the present case and supports the board's conclusion set out above. Specifically, the mere recognition that citric acid was responsible for stabilisation upon storage was not sufficient basis for acknowledging novelty when the purpose, i.e. stabilisation upon storage, and the means of realisation, i.e. the use of a composition including citric acid, were identical in the claim and the prior art.

A similar situation also arose in T 1539/14, invoked by the appellant, in which novelty was denied. The issues underlying this case are closely related to the present case. Therein, the wording of claim 1 implied the ability of citric acid to provide a certain technical effect (reasons, 2.1). In response to the proprietor's

argument that the same effect, obtained using the composition of the prior art, was not attributed to the citric acid component also present therein, but to other components of the prior art composition, the board stated (reasons, 2.7.3):

"These indications have no bearing on the fact that [the prior art] discloses that the citric acid containing composition L can be used in neat form on a hard surface with the purpose of providing this latter with an NTCB..."

The same situation arises in present claim 1 with regard to the boron compound, and novelty is denied for the same reasons.

- 1.4 On the basis of the above considerations, the subject-matter of claim 1 of the main request lacks novelty over D3 (Article 54 EPC).

First auxiliary request

2. Claim 1 of this request differs from claim 1 of the main request in that the term "ashless borated dispersant" is replaced with "ashless nitrogen containing borated polyalkenyl succinimide dispersant".

As set out above, the lubricant compositions of all examples and comparative examples of D3 include as a component thereof "polybutenyl succinic monoimide A", having a boron content of 1.3 mass% (D3, paragraph [0039], entry 5; table 1). That this compound corresponds to the ashless nitrogen containing borated polyalkenyl succinimide dispersant of claim 1 was not contested by the respondent. The newly introduced feature of claim 1 is therefore disclosed in D3 in

combination with the features of claim 1 of the main request (i.e. in the examples of D3).

In consequence, the subject-matter of claim 1 of this request lacks novelty for the same reason as provided for claim 1 of the main request (Article 54 EPC).

Second auxiliary request

3. Claim 1 of this request differs from claim 1 of the main request in that it is specified that in the use to reduce and/or inhibit the corrosion of the metallic engine components, said components "include copper or lead and mixtures thereof".

Paragraph [0045] of D3 discloses a "corrosivity test" carried out on the examples of D3. Specifically, the amounts of copper and lead eluted in the sample oil were measured. The results are shown in table 1, final two rows (D3, page 13). The results provided for the examples show a reduction in the elution of copper and lead compared to the comparative examples. It is therefore clear that the use disclosed in D3 also includes the reduction and/or inhibition of corrosion in metallic engine components including copper or lead and mixtures thereof.

Consequently, the subject-matter of claim 1 of this request lacks novelty over the disclosure in D3 for this reason in addition to the reasons provided for claim 1 of the main request (Article 54 EPC).

Third auxiliary request

4. Claim 1 of this request differs from claim 1 of the main request in that it includes the amendments to claim 1 of the first and second auxiliary requests, addressed above.

Since the board concluded above that the features newly introduced into the respective claim 1 of both the first and the second auxiliary request were disclosed in combination in the examples of D3, the same applies to the subject-matter of claim 1 of this request.

The subject-matter of claim 1 therefore lacks novelty for the same reasons as those provided above for the respective claim 1 of the main request and the first and second auxiliary requests (Article 54 EPC).

Fourth, fifth, sixth and seventh auxiliary requests

5. The respective claim 1 of each of these requests differs from claim 1 of the main request, first, second and third auxiliary requests respectively in the amendment of "an oil-soluble boron containing compound **comprising an** ashless..." to "an oil-soluble boron containing compound **consisting of an** ashless..."

The appellant argued that the examples of D3 only disclosed a single boron-containing compound, namely the ashless nitrogen containing borated polyalkenyl succinimide labelled in D3 as "polybutenyl succinic monoimide A", having a boron content of 1.3 mass% (paragraph [0039], entry 5; table 1). Since this argument was neither contested by the respondent, nor is any other boron containing compound apparent in the

listed ingredients used to prepare the lubricant composition of D3 (paragraph [0039]), the board agrees.

The limitation introduced in claim 1 is therefore already disclosed in D3. Consequently, for the same reasons as provided for claim 1 of the main request and the first, second and third auxiliary requests, the subject-matter of the respective claim 1 of the fourth, fifth, sixth and seventh auxiliary requests lacks novelty (Article 54 EPC).

6. Since none of the claim requests are allowable, the patent is to be revoked.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



N. Maslin

M. O. Müller

Decision electronically authenticated