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**Datasheet for the decision  
of 31 May 2016**

**Case Number:** T 2171/14 - 3.2.06

**Application Number:** 07729977.4

**Publication Number:** 2029865

**IPC:** F01N3/02, F01N3/029, F01N3/20,  
F01N3/36

**Language of the proceedings:** EN

**Title of invention:**

ENGINE EXHAUST GAS ADDITIVE STORAGE SYSTEM

**Patent Proprietor:**

Plastic Omnium Advanced Innovation and Research

**Opponents:**

DELPHI DIESEL SYSTEMS LTD  
Kautex Textron GmbH & Co. KG  
Continental Emitec Verwaltungs GmbH

**Headword:**

**Relevant legal provisions:**

EPC Art. 111(1), 100(c), 123(2), 123(3), 84  
EPC R. 111(2)  
RPBA Art. 11, 13(1)

**Keyword:**

Appealed decision - sufficiently reasoned (no)  
Remittal to the department of first instance - special reasons  
for not remitting the case  
Appeal decision - remittal to the department of first instance  
(no)  
Grounds for opposition - extension of subject-matter (yes)  
Amendments - broadening of claim (yes) - allowable (no) -  
broadening of claim (yes) - added subject-matter (yes)  
Late-filed auxiliary requests VII new, IX new and X new -  
admitted (yes) VIII new - admitted (no)

**Decisions cited:**

G 0002/10

**Catchword:**

Point 5.4



**Beschwerdekammern**  
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Case Number: T 2171/14 - 3.2.06

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.06**  
**of 31 May 2016**

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**Decision under appeal:**      **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
21 October 2014 concerning maintenance of the  
European Patent No. 2029865 in amended form.**

**Composition of the Board:**

**Chairman**                    M. Harrison  
**Members:**                    T. Rosenblatt  
                                      W. Ungler

## **Summary of Facts and Submissions**

- I. European patent No. 2 029 865 was granted with the following independent claim 1:

"System for storing an internal combustion engine exhaust gas liquid additive, the said system comprising a tank for storing the additive and an immersed baseplate (1) positioned through an opening made in the bottom wall of the tank, the said baseplate (1) comprising at least one orifice (9) through which a system for injecting the said additive into the exhaust gases can be fed, and also incorporating at least one other active component (15, 11) which is active in storage and/or metering and which needs to be in contact with the liquid additive in, leaving or entering the additive tank."

- II. Oppositions against the patent were filed by opponents 1, 2 and 3, based on the grounds of Article 100(a), (b) and (c) EPC.

All opponents raised objections under Article 100(c) EPC in their respective opposition notices concerning the feature

"also incorporating at least one other active component (15, 11) which is active in storage and/or metering and which needs to be in contact with the liquid additive in, leaving or entering the additive tank".

The opponents noted that claim 1 as originally filed defined the feature

"also incorporating at least one other active component of the storage system and/or of the injection system."

They objected to the amendment made before grant *inter alia* on the ground that the wording added to claim 1

"which need to be in contact with the liquid additive in, leaving or entering the additive tank"

was only disclosed on page 4, lines 8 to 15 of the description of the application as originally filed in the context of "all", rather than at least one of the active components being incorporated in the baseplate (see notice of opposition of opponent 1, page 5, point D1.5; notice of opposition of opponent 2, paragraph bridging pages 22/23, 1st full paragraph of page 23; notice of opposition of opponent 3, pages 8/9, in particular the underlining of "all" in the last paragraph cited on the bottom of page 8, and the last sentence of the top most paragraph on page 9).

- III. References to the application as originally filed throughout this decision relate to the international publication pamphlet, WO-A-2007/141312, of the international application underlying the patent in suit.
- IV. The proprietor replied to the objections raised in the notices of opposition and in particular also to the above-mentioned specific objection under Article 100(c) EPC (see 3rd paragraph on page 13 of its letter dated 13 February 2012).
- V. At the end of the oral proceedings before the opposition division, the division found that taking

into account the amendments according to auxiliary request V, the amended patent met the requirements of the EPC.

VI. Claim 1 considered allowable by the opposition division reads:

"1. System for storing an internal combustion engine exhaust gas liquid additive, said additive being a reducing agent capable of reducing the NOx present in the exhaust gases of internal combustion engines, the said system comprising a tank for storing the additive and an immersed baseplate (1) positioned through an opening made in a bottom face of the bottom wall of the tank, the said baseplate (1) comprising at least one orifice (9) through which a system for injecting the said additive into the exhaust gases can be fed, and the baseplate also incorporating several other active components (15, 11) which are active in storage and/or metering and which need to be in contact with the liquid additive in, leaving or entering the additive tank; wherein said several other active components comprise a heater and an active component chosen from the following group: a pump (3), a level gauge (15), a temperature sensor (16), a quality sensor, a pressure sensor, a pressure regulator; wherein said tank is made of a plastic having a chemical resistance to said additive; wherein said immersed base plate is positioned such that it is always in the additive provided that the tank is not empty."

VII. The minutes of the oral proceedings before the opposition division contain, in point 7.4, the following summary of the discussions on the issue

"extension of subject-matter" in regard to auxiliary request V:

"02 and 03 presented arguments to demonstrate that the subject-matter of claim 1 was not defined unambiguously, allowing interpretations which extend beyond the content of the application as filed. These arguments were discussed thoroughly until the chairman was prepared to interrupt the proceeding for deliberation of the division.

After the break, the chairman announced the division's opinion according to which claim 1 would not define unduly extended subject-matter. Upon request of 02, it was confirmed that this opinion also considered the Os' arguments brought forward in writing with respect to the main request, which would also apply to present auxiliary request 5. The Os were given time to deliberate and to decide on presenting further objections."

VIII. In its interlocutory decision, the opposition division noted under point 2. in the section "Preliminary comments":

"The Opposition Division preferred not to get tied down in formal arguments, rather concentrated on the fundamental question of whether the actual subject matter described in fact warrants the patent. As discussed below, the main problem with the subject matter of the current patent was one of novelty."

The reason given then for not allowing the proprietor's main request (patent as granted) is lack of novelty (points 7 to 13 of the impugned decision). In regard to



auxiliary request V, the opposition division stated in section "Auxiliary Request V - disclosure":

"36 Auxiliary Request V was amended during the oral proceedings to include the clarification discussed with regard to Auxiliary Request II, so that the content is clear. This subject matter now clearly places the baseplate in an opening in the bottom face of the tank.

37 The Opponents argued that there is no basis in the description for an opening in the bottom face of the tank.

38 While it is true that there is no explicit statement corresponding to the current wording of claim 1, there is no requirement for an explicit disclosure, rather the disclosure must be directly and unambiguously derivable. The skilled reader looking at the patent would not imagine anything other than a baseplate as specified in claim 1 of Auxiliary Request V. If the baseplate is fixed in the bottom face, this will certainly be in a opening. To put the opening, for example, in a side wall and then fix the baseplate to the bottom face may be physically possible, but no skilled man would think that this could be intended.

39 The Opponents also argued that when the baseplate is fixed in the bottom face, all components must be present, citing paragraph 0019 and 0043, since in this one example represented in the figures the feature of fixing to the bottom face is linked to an arrangement in which all components are present. An arrangement with less

components thus represents an intermediate generalisation.

40 This is also not convincing, since the description makes it clear that the baseplate should contain those components considered necessary. Paragraph 0019 merely mentions "several components" and there is no necessity apparent that all components must always be present."

- IX. All opponents and the patent proprietor filed appeals against the interlocutory decision of the opposition division.
- X. With its appeal grounds the appellant-proprietor requested maintenance of the patent as granted and submitted auxiliary requests I to IV.
- XI. In their appeal grounds, appellant-opponents 1, 2 and 3 (also A01, A02, A03 in the following) raised *inter alia* objections under Article 100(c) EPC against the subject-matter of claim 1 considered allowable by the opposition division. These objections encompassed *inter alia* what is hereafter referred to as the "crucial feature":

"incorporating several other active components (15, 11) which are active in storage and/or metering and which need to be in contact with the liquid additive in, leaving or entering the additive tank",

(see letter of A01, 26 February 2015, page 10, in particular 2nd and 3rd paragraphs; A02, 24 February 2015, page 5, 5th paragraph and Section III, point 1 on pages 9 and 11/12; A03, 25 February 2015, Section III,

point a., in particular on page 12, penultimate paragraph).

In the reply to the appellant-proprietor's appeal grounds, appellant-opponent 2 explicitly maintained the objection against claim 1 of the patent as granted, see letter of AO2, 1 July 2015, bottom of page 4.

- XII. In its reply to the appeals of appellant-opponents 1, 2 and 3, the appellant-proprietor submitted auxiliary requests VI to XIII. It also provided its response to the objection under Article 100(c) EPC against the above-mentioned crucial feature (see letter of 6 July 2015, pages 3 and 4).
- XIII. Accelerated examination of the appeal was requested by appellant-opponent 2 in its appeal grounds on the ground that the patent proprietor had initiated infringement proceedings against it before the District Court of Düsseldorf (*Landgericht Düsseldorf*), based on the German part of the European patent (then) pending under case number 4a O 132/14. The case is currently pending before the Regional Court of Düsseldorf (*Oberlandesgericht Düsseldorf*).
- XIV. Taking into account the request for accelerated examination, the Board summoned the parties to oral proceedings on 31 May 2016.
- XV. In a communication sent in preparation for the oral proceedings, the Board informed the parties of its provisional opinion on the case. The Board *inter alia* opined in point 1.1.1 of its communication that the feature added before grant introduced subject-matter extending beyond the content of the application as filed. In particular the Board considered that the only

direct and unambiguous disclosure from the passage on page 4, lines 12-15 of the application as filed (with respect to those components which need to be in contact) appeared to be that "all of them" were incorporated in the baseplate. The Board stated that, absent any further basis in the original application supporting the appellant-proprietor's arguments, the objection under Article 100(c) EPC appeared to prejudice maintenance of the patent. The Board also stated that if its provisional opinion were confirmed, none of the auxiliary requests seemed to overcome that objection.

- XVI. With its letter of 29 April 2016, the appellant-proprietor withdrew its previous auxiliary requests I to IV and submitted, along with further arguments, auxiliary requests "VII new" and "VIII new". It also requested remittal of the case to the opposition division in order to obtain a reasoned decision on the ground for opposition under Article 100(c) EPC, since the opposition division had failed to include any reasoning on certain objections made under this ground of opposition.
- XVII. Oral proceedings before the Board were held on 31 May 2016 in the absence of appellant-opponent 1, as announced in its letter of 1 March 2016. During the oral proceedings, the appellant-proprietor withdrew its auxiliary requests V (considered allowable by the opposition division) and VI to XIII submitted with the letter of 6 July 2015. It also submitted auxiliary requests "IX new" and "X new".
- XVIII. The appellant-proprietor requested that the decision under appeal be set aside and the patent be maintained as granted (main request), or that the opponents'

appeals be dismissed, or that the patent be maintained on the basis of auxiliary requests VII new and VIII new filed with letter dated 29 April 2016, or on the basis of auxiliary requests IX new and X new filed during the oral proceedings of 31 May 2016. Furthermore, in order to get a reasoned decision on the ground for opposition under Article 100(c) EPC, remittal of the case to the department of first instance was requested.

- XIX. Appellant-opponent 1 requested in writing that the decision under appeal be set aside and the European patent No. 2 029 865 be revoked.
- XX. Appellant-opponents 2 and 3 requested that the decision under appeal be set aside and the European patent No. 2 029 865 be revoked.

- XXI. Claim 1 of auxiliary request "VII new" reads:

"System for storing an internal combustion engine exhaust gas liquid additive, said additive being an aqueous solution of urea, the said system comprising a tank for storing the additive and an immersed baseplate (1) positioned through an opening made in the bottom wall of the tank, the said baseplate (1) being located in the bottom of the tank, said baseplate comprising at least one orifice (9) through which a system for injecting the said additive into the exhaust gases can be fed, and said baseplate also incorporating an additive heater (11)."

- XXII. Claim 1 of auxiliary request "VIII new" reads:

"Feed system for feeding a liquid additive into the exhaust gases of an internal combustion engine, the said system comprising an injection system comprising

at least one injection line and one injector; and a storage system for storing an internal combustion engine exhaust gas liquid additive, said additive being an aqueous solution of urea, the said storage system comprising a tank for storing the additive and an immersed baseplate (1) positioned through an opening made in the bottom wall of the tank, the said baseplate (1) being located in the bottom of the tank, said baseplate comprising at least one orifice (9) through which a system for injecting the said additive into the exhaust gases can be fed, and said baseplate also incorporating an additive heater (11); and said storage system comprising a pump for conveying the additive from the tank to the injector, said pump being fixed to the baseplate (1)."

XXIII. Claim 1 of Auxiliary request "IX new" reads:

"1. Feed system for feeding a liquid additive into the exhaust gases of an internal combustion engine, the said system comprising an injection system comprising at least one injection line and one injector; and a storage system for storing an internal combustion engine exhaust gas liquid additive, said additive being an aqueous solution of urea, the said storage system comprising a tank for storing the additive and an immersed baseplate (1) positioned through an opening made in the bottom wall of the tank, the said baseplate (1) comprising at least one orifice (9) through which a system for injecting the said additive into the exhaust gases can be fed, and also incorporating at an other active component (15, 11) which is active in storage and/or metering and which needs to be in contact with the liquid additive in, leaving or entering the additive tank; said baseplate incorporating an additive heater (11); and the other active component being a

pump for conveying the additive from the tank to the injector, said pump being fixed to the baseplate (1)."

XXIV. Claim 1 of Auxiliary request "X new" reads:

"System for storing an internal combustion engine exhaust gas liquid additive, said additive being an aqueous solution of urea, the said system comprising a tank for storing the additive and an immersed baseplate (1) positioned through an opening made in the bottom wall of the tank, the said baseplate comprising at least one orifice (9) through which a system for injecting the said additive into the exhaust gases can be fed, and also incorporating at least one other active component (15, 11) which is active in storage and/or metering and all active components which need to be in contact with the liquid additive in, leaving or entering the additive tank; said baseplate incorporating an additive heater (11)."

XXV. The arguments of the appellant-proprietor may be summarised as follows:

Remittal

The opposition division had not provided a reasoned decision on Article 100(c) EPC. Also, with respect to claim 1 of auxiliary request V, only the objections under Article 123(2) EPC against the further amendments in claim 1 had been considered in the decision. The missing reasoned decision on these objections deprived the appellant-proprietor of the early possibility on which to formulate requests to deal with any of these objections which might ultimately be found by the Board to prejudice maintenance of the patent. The argument raised in the Board's communication was based on a new

interpretation of the crucial feature and in particular considered particular examples of active components, such as a control circuit. These aspects introduced by the Board differed from the inconsistent objections raised by the appellant-opponents, amounting to a fresh case substantially different from that on which the contested decision was based. To ensure fairness to the appellant-proprietor and to allow for two levels of jurisdiction, remittal was justified.

Article 100(c) EPC

Support for the subject-matter of claim 1 as granted was found throughout the description of the application as filed. On page 1, reference was made to the system as defined in claim 1 and its application; the same applied for page 2. On pages 3 and 4, the baseplate and the orifice were mentioned respectively. From line 8 onwards of this page, the purpose of the active components were specified, in line with the wording in the claim, as being to store additive in the tank and to inject additive in the exhaust line. Literal basis for the objected feature was found in lines 12 to 15 on page 4, relating clearly to a preferred embodiment. By disclosing that "all active components which need to be in contact..." were incorporated in the baseplate as a "preferred" embodiment, it was directly and unambiguously also disclosed that, in another embodiment, not all, i.e. one or more, and thus at least one such active component(s) which needs to be in contact with the liquid had to be incorporated in the baseplate. A distinction between active components which needed to be in contact and active components which would not need liquid contact contradicted the understanding of the person skilled in the art concerning the expression "active component". The



skilled person would have understood from several other passages of the description originally filed, such as for example page 4, line 16 to page 5, line 6, that components active in storage and/or metering of the liquid additive referred to components which "acted on" or "operated on" the stored or injected/metered liquid, thus implying direct or indirect contact with the liquid; this was also the only reasonable meaning the skilled person would have derived from the requirement that a component could be active in storage when the liquid was in the tank. A control circuit was nowhere disclosed as being an active component and would not have been considered as such by the skilled person. Moreover, sensors based for example on electromagnetic waves also operated on the liquid and therefore were in "indirect" contact with the liquid. This understanding was supported also by the example of the capacitive type of level gauge mentioned on page 5, line 6. Such sensors required a housing around the capacitor's electrodes in order to work. The actual sensor elements required no direct contact with the liquid. Rather, protected by the surrounding housing, they were in indirect contact with liquid. With respect to active components incorporated on the outside of the baseplate, even these were in contact with the liquid: in the case of a heater, through the baseplate's wall, or in the case of a pump, when the liquid left the tank.

Auxiliary request "VII new"

The request should be admitted since it was filed in reply to the preliminary opinion of the Board and addressed all outstanding objections, including the new issues raised by the Board. The claim was based on the combination of original claims 1 and 3. The expression

"which need to be in contact..." could be deleted without infringing Article 123(3) EPC. The additive heater which was now defined, and which constituted an active component of the storage system, implied the required contact with the additive liquid. Even a heater incorporated on the outside of the baseplate embodied this contact since the wall of the baseplate conducting the heat had to be considered as an element of the heater. There were no other technically reasonable forms of heaters the skilled person would have considered. The subject-matter of the claim implied that the tank system, as defined, had to be suitable for vehicles. Therefore the use of a microwave heater would not realistically be considered by the skilled person due to the requirement of a cage around such an arrangement.

Auxiliary request "VIII new"

This request was filed for similar reasons to those for the filing of auxiliary request "VII new". The amendments were based largely on dependent claims which the Board and the opponents could be reasonably expected to deal with. The added feature "for conveying the additive from the tank to the injector" specified that the pump was in contact with the liquid leaving the tank. Since the claim related to a feed system comprising a pump and also the storage system, the pump could be considered as a feature of the storage system, without affecting the scope of the claim. This was further supported by page 4, lines 17 and 23, where the pump was identified as being an active component of the storage system and/or metering system. Compressors would not be considered by the skilled person to constitute a pump. If air pumps were nevertheless considered, these would incorporate the tank itself as

a component of the pump and thus would also be in contact with the liquid. The expressions "bottom" and "bottom wall" were clear and would be interpreted by the skilled person in line with the passage on page 2, line 33 to page 3, line 1.

Auxiliary request "IX new"

Claim 1 was based on claims 1, 3, 5 and 6 of the application as filed, in combination with the passages on page 4 and on page 6, lines 4 and 5, from which it was clear that the pump was the active component in contact with the liquid additive. Additionally the deleted wording "which need to be in contact..." had been reintroduced in reply to the objection under Article 123(3) EPC. The expression "an other" had the same meaning as "at least one other" and did not exclude the baseplate incorporating further active components.

Auxiliary request "X new"

Claim 1 was based on original claims 1 and 3. It further included the complete wording from page 4, lines 14 and 15. By the conjunction "and", two requirements for the active components incorporated on the baseplate were defined. Firstly, the components were required to be active in storage and/or metering. Secondly they were all required to be in contact with the liquid additive in, leaving or entering the additive tank. The expression "all active components" would be understood by the skilled person. Examples of the active components which needed to be in contact with the liquid additive and incorporated on the baseplate were given in the embodiments. Depending on the particular active components present in a system,

it was always possible to determine whether all of these components which needed to be in contact were actually incorporated on the baseplate. Other active components which were related to the filling of the tank would not be considered, since neither the claims nor the application as filed mentioned such components.

XXVI. The arguments of the appellant-opponents 1, 2 and 3 may be summarised as follows:

#### Remittal

The proprietor's request for remittal should be rejected. In regard to the specific objection under Article 100(c) EPC, reference was made to the submissions in the respective notices of opposition of appellant-opponent 1, in particular to points D.1, D.1.4-D.1.6, of appellant-opponent 2, in particular to pages 17 and 18, and of appellant-opponent 3, in particular to page 8, point 4.1, as well as to those of the proprietor in reply to the oppositions in its letter of 16 February 2012, page 13. Furthermore, point 7.4 of the minutes of the oral proceedings before the opposition division proved that the issue had been discussed between the parties. The relevant objections had also been maintained in the appeal grounds of the appellant-opponents. It was thus unclear why the appellant-proprietor should want to make more arguments in relation to an issue which had anyway been decided in its favour.

#### Article 100(c) EPC

The subject-matter arising from the feature added before grant was not disclosed in the original application. On page 4, lines 12-15 of the description,

it was only disclosed that as a preferred embodiment the baseplate incorporated all the active components which need to be in contact with the liquid. The description did not comprise any definition of the term "active component". The expression in lines 14, 15 of page 4 of the application as filed, "which need to be in contact...", constituted a limitation which applied to the expression "all active components" and therefore disclosed only that the baseplate in this preferred embodiment comprised all active components which needed liquid contact, rather than one or several. There was no support to construe the terminology "need to be in contact" as meaning "to operate/act on liquid" or as encompassing embodiments of "indirect contact". The disclosed examples of active components mentioned, for example for the level gauge, that any type of sensor could be employed, covering therefore also ultrasound sensors which did not require contact with the liquid. The presence of a housing around the electrodes of a capacitive-type sensor did not lead to a different conclusion because the protective element with which the liquid still had to have contact belonged to the sensor.

Auxiliary request "VII new"

The request should not be admitted as it was filed late, not convergent and not allowable in view of the requirements of Articles 84 and 123(2)/(3) EPC. The subject-matter of claim 1 lacked clarity as to the position of the baseplate, not least in view of the expressions "bottom wall" and "bottom" which were both used to define its position at a single location. The deletion of the feature "which need to be in contact with the liquid additive in, leaving or entering the additive tank" violated the requirement of Article

123(3) EPC; the deleted feature was not implicit in the added feature "additive heater". A heater could work on the basis of infrared radiation or with microwaves and would therefore not necessarily require contact with the liquid. Moreover, any reference to an active component had been deleted. Also, the original objection under Article 123(2) EPC was not overcome by the amendments because the claim still lacked a definition that all active components which needed to be in contact with the liquid were incorporated in the baseplate.

Auxiliary request "VIII new"

The request should not be admitted. In its letter of 29 April 2016, the appellant-proprietor had only indicated briefly the basis for the amendments. It had not been explained how the amendments overcame the outstanding objections. Moreover, the requirements of Articles 84, 123(2) and 123(3) EPC were not met. A pump did not necessarily have to be in contact with the liquid. It could be an air pump creating higher pressure which pressure was used to force fluid out of the container, such as known for example from document A12. Consequently the deletion of the feature "which need to be in contact..." extended the scope of protection conferred. Also, the application as filed did not disclose that the pump as specified now in the claim belonged to the storage system. From the cited passage on page 5, it was clear that the pump belonged to the feed or injection system. Moreover, the claim lacked clarity in view of the expressions "bottom wall" and "bottom" used to define the position of the baseplate.

Auxiliary request "IX new"

Claim 1 of this request defined that a single active component was in contact with liquid additive, rather than requiring all active components incorporated in the baseplate to be in contact.

Auxiliary request "X new"

Claim 1 lacked clarity and a basis of disclosure since two groups of active components were now defined. Contrary to the proprietor's argument, the amended wording did not correspond to the formulation of two requirements.

## **Reasons for the Decision**

### *Remittal*

1. According to Article 111(1) EPC, second sentence, the Board of Appeal may either exercise any power within the competence of the department which was responsible for the decision appealed or remit the case to that department for further prosecution.
2. An absolute right for the parties to have each objection decided upon by two instances does not follow from this provision of the EPC. Rather it confers discretionary power to the Boards of Appeal, under due consideration of all circumstances of the case, whether or not to remit the case to the department of first instance.
3. Nevertheless, according to Article 11 of the Rules of Procedure of the Boards of Appeal (RPBA), a Board shall remit a case to the department of first instance if fundamental deficiencies are apparent in the first instance proceedings, unless special reasons present themselves for doing otherwise.
4. Fundamental deficiencies which may justify the immediate remittal include for example the lack of a reasoned decision (Rule 111(2) EPC).
5. The impugned decision presents a fundamental deficiency in that there is no reasoned decision in regard to the specific objections under Article 100(c) EPC made against Auxiliary Request V, which objections had been



made originally against the main request and, as specifically stated in the minutes of the oral proceedings (see point VII above), had been maintained against the subject-matter of claim 1 of Auxiliary Request V found allowable by the opposition division.

- 5.1 As is apparent from point VIII above, the reasons given under the heading "Auxiliary Request V - disclosure" in points 36 to 40 of the decision address merely the amendments introduced during the opposition proceedings in claim 1 of auxiliary request V. Although points 39 and 40 comprise some allusions to the issues arising in respect of the various objections raised under Article 100(c) EPC, these cannot be considered to constitute a reasoned decision. There is no discussion of the arguments provided by the opponents in support of their objections and the cited passages of the description refer to the patent and not to the application as filed. Basis for the division's statement that the description "makes it clear that the baseplate should contain those components considered necessary" is not given; at least the cited paragraphs 19 and 43 of the patent do not contain such a disclosure. The final statement in point 40 of the decision, according to which there would be "no necessity apparent that all components must always be present", ignores the very principle to be applied when examining objections raised under Article 100(c) and 123(2) EPC, which is not about "necessity". Rather, the principle of direct and unambiguous disclosure of the subject-matter resulting from an amendment, as confirmed by the Enlarged Board of Appeal in its decision G 2/10 (OJ EPO 2012, 376, point 4.3), must be considered (see also below).

5.2 The Board additionally observes that the impugned decision also does not contain any reasoned decision with respect to the further opposition ground under Article 100(b) EPC, nor with respect to the subject-matter of independent claim 12.

5.3 The missing reasoning on the mentioned opposition grounds together with the remarks made by the opposition division in the "preliminary comments" section of the reasons for its decision, give rise to serious concerns as to the way in which the opposition division approached in particular the objections made under Article 100(c) EPC, as briefly explained below:

In its preliminary comments in point 2 of the Reasons for the Decision (see point VIII above), the opposition division drew a distinction between what it termed "formal arguments" which it did "not want to get tied down in", and "the fundamental question" concerning "whether the actual subject-matter described in fact warrants the patent". Although it is not explicit from this statement what the opposition division considered to be a "formal argument", the immediately following reference to "the main problem of the patent [being] one of novelty" as well as the absence of any reasoned decision on the opposition grounds of Article 100(b) and (c) EPC in regard to the auxiliary request V, certainly allow the Board to conclude that the latter grounds were considered by the opposition division precisely to be such "formal arguments".

5.3.1 The opposition grounds mentioned in Article 100 EPC, are not divided into substantial and formal requirements. The ground for opposition under Article 100(c) EPC and the corresponding requirement of Article 123(2) EPC in regard to any amendment carried out on

the patent in the course of the opposition and opposition appeal proceedings are of equal fundamental importance compared to other requirements, such as e.g. novelty, inventive step or sufficiency of disclosure, when it comes to deciding whether a patent can be maintained. Also, extension of subject-matter in the terms of Article 123(2) EPC is not a question of "form" of the patent, which might fall under the heading of a "formal requirement", but a substantive one. The standard used by the opposition division, concerning whether the invention "warrants the patent" is not a legal standard recognised by the EPC, not least since such a standard introduces undefined subjective criteria.

- 5.3.2 Of course, the opposition division is in principle free to reach a decision based on any ground of opposition prejudicing the maintenance of the patent. It may therefore choose to consider only one particularly "promising" ground for opposition and to disregard some other, if the promising ground is indeed prejudicial to maintenance of the patent. In the present case, the opposition division indeed decided that the patent could not be maintained as granted due to lack of novelty of the subject-matter of claim 1 and it was thus not obliged to consider any other opposition ground potentially also prejudicing maintenance of the patent. It is however not free to disregard other opposition grounds - or any other objection raised against amended claims under for example Article 83, 84, 123 - when these other grounds (or objections falling under these grounds) which have been raised have not been withdrawn or abandoned and where the previously considered opposition ground (or objection) is not found prejudicial to maintenance of the patent.

5.3.3 In the present case, the original grounds for opposition were not abandoned or withdrawn as is clear from the statement in point 7.4 of the minutes.. The opposition division was thus obliged to give a reasoned decision in regard to all pending objections with respect to the request upon which it considered that the requirements of the EPC were met. Article 101(3)(a) EPC also states that for a patent to be maintained in amended form the requirements of the Convention must be met (see also G 9/91, OJ 1993, 408, Reasons 19).

5.4 Despite the fundamental deficiencies in the impugned decision noted above, the Board decided, having due consideration to the circumstances, not to remit the case to the opposition division.

5.4.1 The first point to note here is that the appellant-proprietor is strictly speaking not negatively affected by the lack of a reasoned decision of the opposition division on the matter of Article 100(c) EPC, precisely since this was decided in its favour. The appellant proprietor also did not provide a plausible argument demonstrating in which way, other than the loss of the possibility of obtaining a reasoned decision in two instances, the missing reasoned decision negatively affected its position in the appeal procedure.

5.4.2 Although argued to be so by the appellant-proprietor, the Board does not accept its argument that the Board had made a fresh case by way of its preliminary opinion given in the communication sent in preparation for the oral proceedings.

As is clear from points II, IV, VII and XI above, the essence of the objection considered in point 1.1.1 of its communication, namely the question of whether or

not there was a basis in the application as filed for "at least one" instead of "all" active component(s) which need to be in contact with the liquid in, leaving or entering the tank to be incorporated on the baseplate, had been raised in the notices of opposition and discussed by the parties during the oral proceedings before the opposition division. The objections were further maintained in the appeal grounds of all three appellant-opponents.

- 5.4.3 To the extent that the Board's analysis of the opponents' objections, as formulated in the communication, was considered by the appellant-proprietor to rely on an interpretation of the terminology used in the claims which had not been discussed before, this *per se* does not constitute sufficient reason for remitting the case.

The appellant-proprietor also did not argue that the Board's analysis itself had resulted in a specific need for remittal of the case (e.g. for the purpose of gathering further evidence or expertise), in order to demonstrate any possible incorrectness of the Board's analysis, which it could not have done equally in the appeal proceedings.

The interpretation of the features of a claim or of terminology which is subject to an objection, is part of the normal tasks performed by the parties and the Board in opposition-appeal proceedings. As long as such interpretation does not raise new issues for which the parties do not have the opportunity to appropriately prepare, the Board does not see any justification for a remittal merely on this ground.

Further, the appellant-proprietor did not argue that the time after receipt of the Board's communication (setting out the alleged "fresh case") was insufficient or that it had not been given appropriate opportunity in the appeal to defend its case. In fact, the appellant-proprietor submitted new auxiliary requests before the oral proceedings as well as during the oral proceedings.

- 5.4.4 The opposition division did not see any merit in the corresponding objections of the opponents, as shown by the statements in point 7.4 of the minutes of oral proceedings before the opposition division (see point VII above), it being noted that the correctness of minutes was not contested by the proprietor.

Thus, even if the case were to have been remitted, the opposition division could only have been expected to provide the reasons why it considered these opposition grounds not to prejudice maintenance of the patent. These reasons would also be expected to be confined essentially to the arguments provided by the parties in writing, because this is what the opposition division must have considered when reaching its decision (according to the cited statement in the minutes). The Board is thus not convinced that such reasoning would have had a more favourable effect on the appellant-proprietor's position in the present appeal as it could only be based on the appellant-proprietor's arguments submitted during the opposition procedure.

The Board can also not see in which way a reasoned decision, favorable for the proprietor, would have helped the proprietor to prepare auxiliary requests in reply to the present issues, except that it might possibly have had more time to prepare its requests.

However, as noted above, the Board does not see that the appellant-proprietor had insufficient time at its disposal for preparing such requests, nor did the proprietor argue that this was the case.

5.4.5 A remittal would therefore primarily have resulted in a further procedure before the opposition division which could not be expected to change the substance of the issue with which the Board is faced in the present proceedings. A remittal of the case would also have considerably prolonged the total duration of the procedure, which would have been unhelpful given the ongoing infringement proceedings as well as the request of appellant-opponent A02 for acceleration.

5.4.6 The Board nevertheless also had to take into account the potential severe consequences the case might have (and has ultimately had) for the appellant-proprietor, i.e. the possible revocation of the patent (see below). Since the appellant-proprietor however did not provide any convincing argument demonstrating how, under the given circumstances, a reasoned decision of the opposition division on the crucial objection might have changed its position in subsequent appeal proceedings, the Board cannot see that the final outcome of the appeal case would have been different merely due to reasons having been given by the opposition division on this specific issue.

5.4.7 It may be added that the present case is also different from other cases in which remittal is frequently found justified, such as remittal on the basis of new evidence admitted into the appeal proceedings or when the claims have been substantially amended based on features taken from the description or the like. All the facts and arguments had already been presented in

the opposition proceedings and again in the appeal proceedings.

- 5.5 In summary, the Board finds that remittal of the case to the department of first instance is not appropriate. The appellant-proprietor's request for remittal must therefore be rejected.

*Article 100(c) EPC*

6. The feature added before grant in claim 1 "[at least one other active component] ... and which needs to be in contact with the liquid additive in, leaving, or entering the additive tank" introduces subject-matter extending beyond the content of the application as filed.
- 6.1 Claim 1 as originally filed defines that the baseplate incorporates "at least one other active component of the storage system and/or of the injection system". It however does not specify whether or not such component needs to be in contact with the liquid additive. Although original claim 1 covers embodiments in which one or several active components incorporated in the baseplate are of the type which need to be in contact with the liquid, the wording of original claim 1 itself does not directly and unambiguously disclose that (merely) at least one such active component may be incorporated in the baseplate, i.e. the generic expression defined in the claim did not disclose this specific possibility.
- 6.2 The wording introduced before grant, and which was proposed by the primary Examiner, concerns in particular the description, page 4, lines 12-15 of the



original application. The entire passage relevant in this context, on page 4, lines 8 to 22, reads:

"The baseplate also incorporates at least one component that is active in storage and/or injection. What that means is that the component is fixed onto or formed as one with the baseplate. This component may be incorporated inside the tank, or on the outside with, if necessary, a connection passing through it.

As a preference, the baseplate according to the invention incorporates several components that are active in storage and/or metering and as an especial preference, it incorporates all the active components which need to be in contact with the liquid additive in, leaving or entering the additive tank.

As a preference, the component is chosen from the following group: a pump; a filter; a level gauge; a heater; a temperature sensor; a quality sensor; a pressure sensor; a pressure regulator; a venturi tube. These elements all have an active part to play in the system for storing and/or injecting the additive, and the fact of incorporating them onto an "immersed" mounting plate (that is to say a mounting plate that is always in the additive, provided that the tank is not empty) exhibits specific advantages: ..."

This passage is completed by a description of the advantages of some of the mentioned components, and is followed, on page 5, by a description of some preferred embodiments of a level gauge, of a heater and of the temperature/quality sensors that might be used.

- 6.3 The Board accepts the argument of the appellant-opponents, according to which the wording introduced into claim 1 before grant is disclosed in the above cited passage only in relation to a baseplate which incorporates all active components which need to be in contact with the liquid additive in, leaving or entering the additive tank (see for example the letter dated 24 February 2015 of appellant-opponent 2, section "Zu 1." on pages 11, 12). It is thus not directly and unambiguously derivable from that part of the description nor from any other part of the application as filed that the storage system of claim 1 should comprise a baseplate incorporating less than all or "at least one" (including exactly one) active component which needs to be in contact with the liquid additive in, leaving or entering the additive tank.
- 6.4 The Board finds the counter-arguments submitted by the appellant-proprietor unconvincing.
- 6.4.1 The Board does not accept the appellant-proprietor's argument according to which the wording "as an especial preference" in lines 13/14 on page 4 of the description (see the 2nd cited paragraph in point 6.2 above) implies other embodiments comprising a baseplate incorporating not all, i.e. only several or "at least one", such active component(s). This interpretation does not fit the actual wording of that passage. The first part of the sentence in that paragraph sets out that the baseplate incorporates several active components - without being specified (and thus undisclosed) whether these several components need or do not necessarily need to be in contact with the liquid and whether it incorporates all or only part of the respective group (i.e. those components which need

and those which do not need contact). From the second part of the sentence, introduced by the conjunction "and", the skilled person then understands that, as a preferred option of this general disclosure, the baseplate incorporates all active components which need to be in contact with the liquid. The only direct and unambiguous disclosure from this passage with respect to those components which need to be in contact, is thus that all of them are incorporated in the baseplate.

6.4.2 Although it may fall within the skilled person's capacities having read that paragraph to then conceive other alternatives of a baseplate incorporating less than all or even only a single such active component, such alternative embodiments, considered to be implied by the appellant-proprietor, result from further reflections on how the baseplate could also be realised. As straightforward as such reflections in the present case may appear (at least in the sense that they might not require inventive activity), they do not however belong to the direct and unambiguous disclosure. They go beyond an implicit disclosure of a corresponding embodiment (with less than all components). An implicit disclosure of the suggested alternative embodiments would have to arise as a necessity from what is stated, without being explicitly stated. This is not the case here.

6.4.3 The Board can also not accept the appellant-proprietor's interpretation of the term "active component" as designating components which "operate on" or "act on" the liquid additive, either by direct or indirect contact, thus implying the active components are those which necessarily need liquid contact.

- (a) The original application does not contain any definition of the term "active component".
- (b) Literal disclosure for the appellant-proprietor's interpretation has not been given and the Board could also not find such.
- (c) To the contrary, the passage on page 4, lines 8 to 11 (first paragraph in point 6.2 above), discloses that the components active in storage and/or injection may be incorporated on the outside of the baseplate, without necessarily requiring connection passing through the baseplate (see the expression "if necessary"). In the case of an active component incorporated on the outside of the baseplate without connection through the baseplate, there is no reason that a skilled person would consider such an active component as still necessarily being in contact with the liquid in, leaving or entering the tank.
- (d) The appellant-proprietor argued that certain passages of the description on pages 1, 2 and 3 when read in context, gave rise to the understanding of "active component" in this way. The Board cannot accept this argument because the content of these pages, even when read in context with the more detailed description of the invention on pages 4 to 9 or as defined in the original claims, is not more specific on this issue. Page 1 essentially describes the background and some prior art in regard to the invention, whereas page 2 mentions some problems existing in the prior art before it recites from line 26 onwards the wording of original claim 1. There is however no particular emphasis on components and their need to be in

contact with the liquid. The description of the baseplate on page 3 also referred to by the appellant-proprietor does not add anything in this respect.

- (e) The examples given later in the description for many of the active components also do not limit these to particular preferred types. Any type of sensor is considered appropriate (see for example, page 5, lines 4-6, "The level gauge... may be of any type. Preferably, ... with no moving parts ... of the capacitive type"), specific limitations for heaters or pumps are not disclosed. In case of a heater, the skilled person knows appropriate types which work on the principles of conduction, convection or electromagnetic radiation in different wavelength bands (e.g. infrared or microwaves). Even though in case of an external heater the heat generated by it must be transferred (or transmitted) in some way to the liquid on the other side of the baseplate, as also argued by the appellant-proprietor, a thermally conductive (or transmissive) wall of the baseplate, which would then be required, would not be understood by the skilled as being part of the heater, but part of the baseplate itself. Similarly, a pump in the form of e.g. a roller pump incorporated on the outside of the baseplate and in contact with the additive line would not be considered to be in contact with the liquid. A level gauge apart from the example of the capacitive type given, may work with ultrasound, optical or radar waves, none of which would necessarily require contact with liquid.
  
- (f) Also from the wording "component that is active in storage and/or injection/metering" (page 4, lines

8/9 and 13; see 1st, 2nd paragraphs in point 6.2) or the wording "other active component of the storage system or of the injection system" of original claim 1, when considering in particular those components which might be regarded as active "in storage", it is not directly and unambiguously derivable that such a component pertaining specifically to the storage function must be in contact with the liquid in the tank. The above example of an external heater can be considered as a component active in storage in that it maintains the stored additive at a certain temperature for example.

- (g) The specific examples of the components given on pages 4 and 5 of the description also do not allow the Board to reach a different conclusion. Indeed many of the components mentioned there achieve specific advantages for the system if they are incorporated on the baseplate (arranged in a particular position in the tank) and are in contact with the liquid additive. However, it is not directly and unambiguously derivable that the mentioned advantages are necessarily linked to the contact with the liquid.
  
- (h) The appellant-proprietor's argument that the term "in contact" would have been understood by the skilled person as encompassing "indirect" contact, thus implying a distance between the liquid and the actual active component, has no support in the application as filed. The exemplary reference to the capacitive type level gauge on page 5 is insufficient in this respect. Protective housings or covers which might be required around the actually "active" element of an active component in

order to provide for its proper function or to protect it against a corrosive environment, such as e.g. the housing around the electrodes of a capacitive level gauge, would normally be considered by the skilled person as being part of that active component (sensor), since the component normally has such a housing as an integral feature. Hence it does not support the argument that the expression "active component which need[s] to be in contact..." was intended to encompass also indirect or distant (inter-) action with the liquid, such as in the case of a radiant heater on the baseplate's exterior.

- 6.5 The appellant-proprietor's further contention that the District Court of Düsseldorf had accepted its interpretation of the expressions "active component" and "which need to be in contact" is also not accepted.
- 6.5.1 In the context of the Courts considerations in regard to the plaintiff's (appellant-opponent 3) request to stay the proceedings before it, the Court considered the likelihood that the present Board could find the opposition ground of Article 100(c) EPC to prejudice maintenance of the patent. Although it considered this to be unlikely, it saw itself unable to adequately examine this issue since the original application had not been submitted to it (point 2 on pages 30/31 of the Court's decision in case 4a O 132/14 issued 29 September 2015). Hence the Court did not consider the crucial issue above, i.e. whether or not a disclosure could be found in the application as filed for the feature that (only) "at least one", and not necessarily all, active components of the storage and/or metering which need to be in contact with the liquid

additive in, leaving or entering the additive tank are incorporated on the baseplate.

6.5.2 Furthermore, in the reasons for its decision that the amended patent was infringed, the Court gives its interpretation of the features of the claim before it (a translation into German of claim 1 of auxiliary request V, see above point VI; Court's decision, pages 23/24, points (aa) and (1)). The Court indeed considered the expression "in contact" to encompass also indirect contact, as argued by the appellant-proprietor in the present proceedings - which the present Board does not accept for the above reasons. The Court construed the feature "active component" in view of the other features defined in the amended claim, namely in view of *inter alia* the need to be in contact with the liquid additive and in view of the list of components defined in the claim. The Court did nevertheless not consider whether the broad wording of original claim 1 or on page 4, lines 8-11 and 12/13 (first paragraph and first part of the following sentence recited in point 6.2) had to be understood as implicitly being limited to only such active components which need to be in contact.

6.6 The subject-matter of claim 1 of the patent as granted thus introduces subject-matter extending beyond the content of the application as filed, whereby the ground for opposition under Article 100(c) EPC prejudices maintenance of the patent as granted.

*Auxiliary request V*

7. This request was found by the opposition division to meet the requirements of the EPC. The request to maintain the patent based on this auxiliary request in



fact corresponds to the appellant-proprietor's request to dismiss the appeals of the appellant-opponents 1, 2 and 3. Auxiliary request V (together with the then auxiliary request VI) was withdrawn during the oral proceedings before the Board in reaction to the Board's conclusion, and the brief reasons for it, given orally in regard to the crucial objection on the main request, whereby the same underlying reasons evidently applied to claim 1 of this request, since its subject-matter was not limited to a storage system with a baseplate incorporating all the active components which needed to be in contact with the liquid. Due to the advanced time when the final requests of the parties were confirmed (the oral proceedings closed at 19:45 hours), the appellant-proprietor had nevertheless contrary to its prior withdrawal of auxiliary request V reiterated the request for dismissal of the appellant-opponents' appeals which corresponded to Auxiliary Request V. The request is evidently not allowable for exactly the same reasons as apply to claim 1 of the main request. Since the request was anyway withdrawn, the request can not be allowed.

*Auxiliary request "VII new" - "X new"*

8. These requests were filed after the time limit for filing the response to the appeal grounds of the appellant-opponents (Article 12(1) and (2) RPBA) and therefore constitute an amendment to the appellant-proprietor's complete case.
9. According to Article 13(1) RPBA, any amendment to a party's case may be admitted and considered at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new

subject-matter submitted, the current state of the proceedings and the need for procedural economy.

In order to be in line with the requirement of procedural economy, amendments should be *prima facie* allowable in the sense that they at least overcome the objections raised against previous requests without giving rise to any new ones.

Moreover, the amendment of a party's case requires that its submission is accompanied by reasons justifying its admittance into the proceedings in order to allow the other parties and the Board to assess easily whether the proposed amendments are necessary and appropriate.

*Auxiliary request "VII new"*

10. Taking into account the criteria referred to above in Article 13(1) RPBA, the Board decided to exercise its discretion to admit auxiliary request "VII new" into the proceedings.
11. The request is nevertheless not allowable because its amended claim 1 does not meet the requirement of at least Article 123(3) EPC.
  - 11.1 The critical feature of granted claim 1 "also incorporating at least one other active component (15, 11) which is active in storage and/or metering and which needs to be in contact with the liquid additive in, leaving or entering the additive tank" has been replaced by the feature "said baseplate also incorporating an additive heater (11)".
  - 11.2 The deletion of the stated feature leads to an extension of the scope of protection. The system for

storing covered by granted claim 1 required that at least one active component be incorporated on the baseplate with *inter alia* the further limitation that this active component required liquid additive contact when the liquid is in the tank, leaves or enters it. The amended claim does not anymore require liquid contact for active components when in the tank, leaving or entering it. It thus covers a broader class of systems for storing.

- 11.3 The appellant-proprietor's argument that the feature "additive heater" would imply necessarily liquid contact fails for similar reasons as set out above under point 6.4.3. above. The additive heater is not limited to any specific type and covers therefore also heaters based on the transmission of electromagnetic waves, including microwaves. The appellant-proprietor contested that a microwave heater would reasonably be considered by a skilled person to be used in vehicles. The Board does not agree.

On the one hand, the claimed storage system is not limited to vehicles by the references in the claim to urea, the combustion engine exhaust gas or the injection of the additive in the exhaust gas. It covers storage systems for large engines, like stationary engines or ship diesel engines. In these types of engines, control of exhaust gas emissions is also of concern. There is no reason apparent that the security or space constraints perceived by the appellant-proprietor and the alleged necessity of a cage around a microwave heater installation derived therefrom would hinder the skilled person from considering these types of heaters as appropriate for the intended purpose to heat the additive in systems for storing the liquid additive for such bigger engines.

Moreover, even if claim 1 were considered to be limited to systems for vehicles, such as passenger cars and trucks (as was argued by the appellant-proprietor), which indeed could be understood as imposing certain space and safety constraints, the Board cannot accept the appellant-proprietor's argument based on the perceived potential dangers implied by the use of such a heater. For example, auxiliary park heating appliances use burners operating with continuous flames, which are conceived to operate even in the absence of the driver. Potential risks linked to the use of a certain technology are apparently not an obstacle for the skilled person to consider generally whether it may be used despite its apparent risks. The appellant-proprietor could not provide any other specific reason and the Board cannot see any such either, for which the skilled person would have excluded a microwave heater as being an appropriate heater in the present case.

*Auxiliary request "VIII new"*

12. This request was submitted together with auxiliary request "VII new" with the letter of 29 April 2016. Taking into account the criteria referred to above under point 9., the Board decided to exercise its discretion under Rule 13(1) RPBA not to admit auxiliary request "VIII new" into the proceedings for the following reasons.
13. The request does not overcome the outstanding objections (see point 13.1 below) and introduces for the first time new objections which had never been discussed before (point 13.2 below). It can thus not be

considered to be at least *prima facie* allowable in the above sense.

13.1 The subject-matter of claim 1, although being further limited to a feed system by further incorporating the features from original and granted claims 5, 6, suffers the same deficiency as auxiliary request "VII new". The effect of the deletion of the critical feature of granted claim 1, leading to an extension of the scope of protection, is not changed by the further features added to the claim defining that the storage system comprises a pump for conveying the additive from the tank to the injector, said pump being fixed to the baseplate. Again, and contrary to the view of the appellant-proprietor, the claim cannot be regarded as being limited to pumps which would necessarily imply contact with the liquid additive when leaving the tank. The definition still allows for other embodiments, such as roller pumps with rollers acting on a flexible liquid line. Consequently, the objection under Article 123(3) EPC cannot immediately be seen to have been overcome.

13.2 Further, the amendments give rise at least *prima facie* to further objections under at least Article 123(2) EPC and Rule 80 EPC. For example, original and granted claims 5 relate to a feed system comprising *inter alia* the "storage system according to claim 1". Original and granted claims 6 in turn depend on the respective claim 5 and define that the feed system is further "characterised in that it comprises a pump which is fixed to the baseplate". In amended claim 1 the pronoun "it" has been replaced by the expression "said storage system". However, from the wording of the original and granted claims it is not clearly derivable whether the pronoun "it" referred to the "storage system" or to the

"feed system". The appellant-proprietor indicated, as further basis for this amendment, certain passages in the description. The passage on page 5, lines 31-36, which was indicated also as a basis for the additional wording introduced in claim 1 "for conveying the additive from the tank to the injector", merely suggests that the pump is considered as a feature of the feed system. The further passage on page 4, describing the pump as one of the active components of the storage system and/or injection system and/or metering system (see above point 6.2) can also not be considered as a direct and unambiguous disclosure for this replacement. The appellant-proprietor further argued that it would be of no particular technical meaning, whether the pump would be considered to belong to the storage system or to the feed system, since the feed system comprised the storage system. This argument is however not accepted, since it raises the question why the pronoun "it" has been replaced at all. The requirement of clarity, referred to by the appellant-proprietor, is not a ground for opposition (Article 100 EPC, Rule 80 EPC). This amendment is therefore neither necessary nor appropriate and at least *prima facie* introduces further objections under Article 123(2) EPC.

*Auxiliary request "IX new"*

14. This request was submitted during the oral proceedings before the Board. It takes into account the objections raised against the final features of claim 1 of auxiliary request "VIII new". The Board thus decided to exercise its discretion under Rule 13(1) RPBA to admit auxiliary request "IX new" into the proceedings, in particular since it was not immediately evident that the request would not be allowed.

15. However, the request is nevertheless not allowable, at least because the subject-matter of claim 1 extends beyond the content of the application as originally filed ultimately for very similar reasons as apply to claim 1 of the main request (Art. 123(2) EPC).

The critical feature of granted claim 1, deleted previously in auxiliary requests "VII new" and "VIII new", has been re-introduced in amended claim 1 of auxiliary request "IX new". At the same time, the expression "at least one other active component..." has been replaced by "an other component...". In view of this, the claim however does not require that all active components which are active in storage and or metering and which need to be in contact with the liquid additive are incorporated in or on the baseplate, contrary to the passage on page 4 from which this feature is derived. No other basis in the disclosure was given on which the Board should take a different view of this particular feature and no further arguments were submitted by the appellant-proprietor which altered the Board's earlier finding. The further amendments made in the final feature of claim 1 also do not affect this particular initial objection and therefore also cannot alter the Board's conclusion, nor did the appellant-proprietor argue that they did.

*Auxiliary request "X new"*

16. This request was also submitted during the oral proceedings before the Board. Compared to the previous auxiliary requests in which claim 1 is directed to a feed system, claim 1 of this request is based on a combination of original claims 1 and 3 and incorporates further literally the wording of page 4, lines 14/15.

This request can thus be considered despite its extremely late submission as a *bona fide* attempt to overcome the original objection against granted claim 1. The Board thus decided to exercise its discretion under Rule 13(1) RPBA to admit auxiliary request "X new" into the proceedings.

17. Nevertheless this request is not allowable because the amended claim does not meet at least the clarity requirement of Article 84 EPC.
- 17.1 The amended claim defines *inter alia* that said baseplate incorporates at least one other active component which is active in storage and/or metering and all active components which need to be in contact with the liquid additive in, leaving or entering the additive tank. The Board accepts the appellant-opponents' argument that this feature lacks clarity due to the conjunction "and". The wording of the claim unmistakably implies that the baseplate incorporates two groups of active components, namely those active in storage and/or metering and, secondly, those which need to be in contact. The appellant-proprietor's argument that the wording defined two requirements which the single group of active components had to meet is not compatible with the actual wording, irrespective of whether this wording was intended to reflect this.
- 17.2 Moreover, it is unclear in regard to the feature "baseplate incorporates ... all active components... which need to be in contact with the liquid additive in, leaving or entering the additive tank", which specific components are exactly required to be incorporated on the baseplate. The claim requires all those components active in storage incorporated in or on the baseplate which need to be in contact with the



liquid when the liquid, for example, enters the tank. A component which is in contact with liquid entering the tank could be e.g. a tank inlet or an inlet valve, so that the claim seems to encompass even such embodiments. The appellant-proprietor argued that this question could be decided clearly by the skilled person in each case based on the actual components of a particular system for storing; components required for filling the tank were clearly not intended here since the whole application did not mention the filling operation. Although the appellant-proprietor is correct that filling of the tank is nowhere mentioned, the term "entering" in the expression "...liquid additive in, leaving or entering the additive tank" does not exclude this meaning, nor is it stated anywhere that this should be the case. In the absence of any clear definition of the expression "all active components" the limits of protection sought are vague, contrary to the clarity requirement of Article 84 EPC.

18. Absent any request which meets the requirements of the EPC, the patent has to be revoked according to Article 101(3)(b) EPC.

**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:



M. H. A. Patin

M. Harrison

Decision electronically authenticated