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**Datasheet for the decision
of 27 May 2022**

Case Number: T 1098/18 - 3.2.05

Application Number: 12000533.5

Publication Number: 2447589

IPC: F16L55/165, F16L55/179

Language of the proceedings: EN

Title of invention:
Device for repairing a pipe

Patent Proprietor:
LMK Technologies, LLC

Opponent:
Per Aarsleff A/S

Relevant legal provisions:
EPC Art. 76(1), 108 sentence 3
EPC R. 99(2)
RPBA 2020 Art. 13(2), 25(3)

Keyword:

Admissibility of appeal (yes)

Amendment after summons - admittance (third auxiliary request:
yes)

Divisional application - subject-matter extends beyond content
of earlier application (all requests: yes)

Decisions cited:

G 0001/05, G 0001/06, T 1668/14



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Case Number: T 1098/18 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 27 May 2022

Appellant: LMK Technologies, LLC
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 26 February
2018 revoking European patent No. 2447589
pursuant to Article 101(3) (b) EPC.**

Composition of the Board:

Chairman P. Lanz
Members: B. Spitzer
A. Bacchin

Summary of Facts and Submissions

- I. The patent proprietor lodged an appeal against the opposition division's decision to revoke European patent No. 2 447 589 (the patent). The patent is based on a divisional application from the earlier application No. 08798479.5 published as WO 2009/029516 A1.
- II. The opposition was filed against the patent as a whole based on the grounds of Article 100(a) (in conjunction with Article 54 EPC (lack of novelty) and Article 56 EPC (lack of inventive step)), Article 100(b) and Article 100(c) EPC.
- III. In the decision under appeal, the opposition division decided that the subject-matter of claim 1 of the patent as granted and auxiliary requests 1 and 2 extended beyond the content of the application as filed (Article 123(2) EPC).
- IV. On 7 July 2021, the board issued a summons to oral proceedings. In a communication under Article 15(1) of the Rules of Procedure of the Boards of Appeal 2020 (RPBA 2020 - see OJ EPO 2019, A63) dated 28 March 2022, the board gave its preliminary opinion.
- V. Oral proceedings before the board were held on 27 May 2022 in mixed mode with the consent of the parties. The appellant (patent proprietor) was remotely connected while the respondent (opponent) and the board were present at the premises of the Boards of Appeal.

VI. *Requests*

The appellant (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained as amended on the basis of the claims of the main request or, in the alternative, the claims of the first or second auxiliary request, all filed with the statement of grounds of appeal, or the third auxiliary request filed during the oral proceedings.

The respondent (opponent) requested that the appeal be rejected as inadmissible or that the appeal be dismissed as unallowable.

VII. Independent claims 1 and 9 of the main request have the following wording (amendments compared to claim 1 of the patent as granted are underlined; the parties' feature numbering appears in square brackets):

"1. An apparatus for repairing a main pipe line (50) and a lateral pipe line (52) connected thereto and in communication therewith to form a pipe joint, comprising: a bladder assembly (16) comprising a main bladder tube (34) and a lateral bladder tube (36); **[1.1.1]** a liner assembly (14) comprising a main liner member (38) at least partially surrounding the main bladder tube (34) and a lateral liner tube (40) **[1.1.3]** extending from the main liner member (38) at a liner juncture, **[1.1.2]** the liner assembly being made of a resin absorbent material; the lateral bladder tube (36) and the lateral liner tube (40) being adapted to extend within the lateral pipe line (52) with the lateral bladder tube (36) being inside the lateral liner tube (40) and the lateral

liner tube (40) being between the lateral pipe line (52) and the lateral bladder tube (36); and **[1.1.4]** the lateral liner tube (40) and lateral bladder tube (36) are movable between a first position wherein the lateral liner tube (40) and lateral bladder (36) tube are inverted within the main bladder tube (34), and a second position wherein the lateral liner tube (40) and lateral bladder tube (36) are everted into the lateral pipe line (52); and **[1.1.5]** a gasket (56), being made of hydrophilic material capable of swelling in reaction to contact with a liquid or **[1.1.6]** being made of impermeable compressible material, thereby forming a seal between the liner assembly and main and lateral pipe lines at the joint; characterized in that **[1.1.7]** the gasket (56) is disposed on the main liner member (38) and **[1.1.8]** surrounding a portion of the lateral liner tube (40) at the liner juncture."

"9. An apparatus for repairing a main pipe line (50) and a lateral pipe line (52) connected thereto and in communication therewith to form a pipe joint, comprising:

a bladder assembly (16) comprising a main bladder tube (34) at least partially surrounding the main bladder tube (34) and a lateral bladder tube (36); **[9.1.1]** a liner assembly (14) comprising a main liner member (38) and a lateral liner tube (40) **[9.1.3]** extending from the main liner member (38) at a liner juncture, **[9.1.2]** the liner assembly being made of resin absorbent material;

the lateral bladder tube (36) and the lateral liner tube (40) being adapted to extend within the lateral pipe line (52) with the lateral bladder tube (36) being inside the lateral liner tube (40) and the lateral liner tube (40) being between the lateral pipe line

(52) and the lateral bladder tube (36); **[9.1.4]** and the lateral liner tube (40) and lateral bladder tube (36) are movable between a first position wherein the lateral liner tube (40) and lateral bladder tube (36) are inverted within the main bladder tube (34), and a second position wherein the lateral liner tube (40) and lateral bladder tube (36) are everted into the lateral pipe line (52); and the lateral liner tube (40) and lateral bladder tube (36) are movable between a first position wherein the lateral liner tube (40) and lateral bladder tube (36) are inverted within the main bladder tube (34), and a second position wherein the lateral liner tube (40) and lateral bladder tube (36) are everted into the lateral pipe line (52); and **[9.1.5]** a ring shaped and (62) [*sic*] being made of hydrophilic material capable of swelling in reaction to contact with a liquid or **[9.1.6]** being made of an impermeable compressible material, thereby foaming [*sic*] a seal between the liner assembly and main and lateral pipe lies [*sic*] at the point [*sic*] joint; characterised in that the band (62) is positioned on the main liner tube (38) and extending around the juncture between the main liner tube (38) and the lateral liner tube (40)."

VIII. Auxiliary requests

Compared with claims 1 and 9 of the main request, claims 1 and 9 of the first auxiliary request replace the wording "in reaction to contact with" with "in response to being exposed to" and the verb "everted" with "inverted". In claim 9 of the first auxiliary request, the added feature "at least partially surrounding the main bladder tube (34)" further specifies the "main liner member (38)" instead of the "main bladder tube (34)" as in claim 9 of the main

request.

Claim 1 of the second auxiliary request is amended with respect to claim 1 of the first auxiliary request by incorporating the features of claim 2 of the first auxiliary request ("wherein the gasket (56) includes a tubular portion (60) having a first end and a second end and a flange portion (58) extending outwardly from one of the first and second ends of the tubular portion (60)"). Independent claim 8 of the second auxiliary request corresponds to independent claim 9 of the main request and replaces the wording "in reaction to contact with" with "in response to being exposed to" and the verb "everted" with "inverted" as in claim 9 of the first auxiliary request.

Claim 1 of the third auxiliary request is based on claim 9 of the first auxiliary request in which feature [9.1.1] is amended and reads: "a liner assembly (14) comprising a main liner tube (38) surrounding the main bladder tube (34) and a lateral liner tube (40)".

IX. The parties' submissions, to the extent that they are relevant to this decision, may be summarised as follows:

Admissibility of the appeal

- *Appellant (patent proprietor)*

The appellant referred to the board's communication provisionally finding that the statement of grounds of appeal gave sufficient reasons for setting aside the decision under appeal. It was possible to infer that the amended claims were caused by the objections identified by the opposition division under Article

123(2) EPC and were filed with the aim of overcoming these objections. Therefore, the appeal was admissible.

- *Respondent (opponent)*

The appeal was inadmissible because the appellant implicitly accepted the opposition division's decision by filing an amended main request. Contrary to the requirements of Article 108 EPC, Rule 99(2) EPC and Article 12(2) RPBA 2020, the appellant did not provide reasons why the appealed decision was wrong.

Main request: allowability of amendments

- *Appellant (patent proprietor)*

The feature "at least partially surrounding the main bladder tube (34)" should have been inserted in feature [9.1.1] as in corresponding claim 1 of the main request and as done in claim 9 of the first auxiliary request.

- *Respondent (opponent)*

As observed in the board's communication (see board's communication, point 10.4.2), the feature of claim 9 "a main bladder tube (34) at least partially surrounding the main bladder tube (34)" contravened the requirements of Article 76(1) EPC.

*Claim 1 of the first and second auxiliary requests:
allowability of amendments (features [1.1.1])*

- *Appellant (patent proprietor)*

Basis for feature [1.1.1] could be found in the published earlier application (document D0), page 4,

line 31 to page 5, line 2 together with Figures 1 to 3. The liner assembly 14 included a main liner tube 38 and a lateral liner tube 40, and the bladder assembly was fitted on the interior of the liner assembly 14. From the drawings, especially Figure 2 of document D0, it was apparent that the main liner member 38 did not fully surround the main bladder tube 34 since the main bladder tube further extended in the longitudinal direction. It was not relevant that claim 1 of the first auxiliary request mentioned a main liner member 38 while the passage on page 4, line 31 of document D0 referred to a main liner tube because a main liner member and a main liner tube were functional equivalents. A main liner member was disclosed on page 3, line 5, for instance.

- *Respondent (opponent)*

There was no direct and unambiguous disclosure for feature [1.1.1] in document D0. The passage on page 4, line 31 of document D0 referred to a main liner tube. A main liner member and a main liner tube were not equivalents. A main liner member was broader compared to a main liner tube. This was evident from dependent claim 3 of document D0 where it was claimed that "*the main liner member (38) is formed as a tube*". Furthermore, the main liner tube fully surrounded the bladder tube in the circumferential direction. There were two ways of repairing a tube: the so-called "tube solution" according to US practice with a tube surrounding the pipeline by 360 degrees and the so-called "hat installation solution" according to European practice with a main liner member partially surrounding the main bladder tube. The earlier application and the patent were restricted to the "tube solution". A main liner member partially surrounding

the main bladder tube related to the "hat installation solution" and thus went beyond the content of document D0.

Third auxiliary request: admittance

- *Appellant (patent proprietor)*

The third auxiliary request should be admitted into the appeal proceedings since it did not raise new issues but addressed all existing objections. There were exceptional circumstances because the respondent provided its arguments concerning the allowability of feature [1.1.1] of claim 1 of the first and second auxiliary requests at a very late stage, i.e. after the board's communication. The respondent outlined the difference of US and European pipeline joints only during the oral proceedings before the board. This constituted exceptional circumstances.

- *Respondent (opponent)*

The third auxiliary request should not be admitted into the appeal proceedings. The appellant could have filed this request earlier, at the latest in reaction to the board's communication. It raised new issues by deleting the expression "at least partially". Furthermore, it was *prima facie* not allowable as it constituted an intermediate generalisation due to the omission of the features "launcher device" and "overlapping edges". Furthermore, no exceptional circumstances justified with cogent reasons had been brought forward by the appellant.

Third auxiliary request: allowability of amendments

- *Appellant (patent proprietor)*

Taking the respondent's interpretation of the term "surrounding" being related to the diameter of the pipe, page 4, line 31 to page 5, line 2 and Figures 1 to 3 of document D0 clearly and unambiguously formed a basis for feature [9.1.1] "a liner assembly (14) comprising a main liner tube (38) surrounding the main bladder tube (34) and a lateral liner tube (40)". It was not an unallowable intermediate generalisation as the overlapping edges were not disclosed as an essential feature. Furthermore, the launcher device of Figures 1 to 3 was not inextricably linked to the main bladder tube. For instance, claim 26 of document D0 referred to the bladder assembly *per se* without the launcher device.

- *Respondent (opponent)*

The amended feature [9.1.1] constituted an unallowable intermediate generalisation of the disclosure in document D0. The basis given by the appellant related to an embodiment. Several features had been omitted, such as the overlapping edges and the launcher device. Both were essential features. The provisions of Article 76(1) EPC were therefore not met.

Reasons for the Decision

1. Admissibility of the appeal

1.1 In accordance with Article 108, third sentence, and Rule 99(2) EPC, for an appeal to be admissible, a

statement of grounds of appeal must be filed in which the appellant indicates the reasons for setting aside the decision impugned or the extent to which it is to be amended and the facts and evidence on which the appeal is based.

It is not an absolute requirement for admissibility that the appellant attacks the opposition division's decision as flawed. Where amended claims are filed with the statement of grounds of appeal, the appeal may also be considered admissible if sufficient reasons are provided why the amendments are apt to remedy the deficiencies identified by the opposition division (see, *inter alia*, T 1668/14, point 2.2 of the Reasons). Whether these arguments are convincing or likely to be ultimately successful is not relevant for determining admissibility of the appeal. Thus, contrary to the respondent's view, an appeal is not necessarily inadmissible for the sole reason that the patent proprietor/appellant filed amended claims (and defended them) in the statement of grounds of appeal. It is also not necessary for an appeal to be admissible that the patent proprietor/appellant filed grounds in defence of a version of claims (those on which the decision of the opposition division was based) that it is no longer defending in appeal.

- 1.2 In this case, the appellant indicated in the statement of grounds of appeal sufficient reasons for setting aside the decision under appeal since it is possible for the board and the other party to infer that the amended claims were caused by the objections identified by the opposition division under Article 123(2) EPC (see section 2 of the Reasons for the decision under appeal) and were filed with the aim of overcoming these objections. They additionally addressed the other

objections raised by the respondent in opposition proceedings and provided reasons against them. It is therefore possible for the board to understand the reasons put forward why the decision under appeal must be set aside.

- 1.3 In view of the above, the statement of grounds of appeal complies with Article 108, third sentence, and Rule 99(2) EPC. Since it is uncontested that the further admissibility requirements set out in Articles 106 to 108 EPC and Rules 97 and 99(1) (b) and (c) EPC are met, the appeal is admissible.
2. Main request: allowability of amendments
 - 2.1 The patent is based on a divisional application from the earlier European patent application No. 08798479.5 published as WO 2009/029516 A1 (document D0). The description and the figures of the application as originally filed are identical to the description and the figures of the earlier application as originally filed (document D0).
 - 2.2 Article 76(1) EPC provides that a divisional application may be filed only for subject-matter which does not extend beyond the content of the earlier application as filed. To determine whether subject-matter extends beyond the content of the earlier application (Article 76(1) EPC), the same principles are to be applied as for Article 123(2) EPC. Thus, the subject-matter must be directly and unambiguously derivable from the earlier application as filed (see G 1/05, OJ EPO 2008, 271 and G 1/06, OJ EPO 2008, 307).
 - 2.3 As confirmed by the appellant, the additional wording "*at least partially surrounding the main bladder tube*"

(34)" was inserted at the wrong section of claim 9 of the main request. It should have been inserted in feature [9.1.1] as in corresponding claim 1 of the main request and as was done in claim 9 of the first auxiliary request. Thus, there is agreement that there is no basis in the earlier application for the feature "*a main bladder tube (34) at least partially surrounding the main bladder tube (34)*".

2.4 Conclusion on allowability of amendments in the main request

The subject-matter of claim 9 of the main request does not fulfil the requirements of Article 76(1) EPC.

3. First auxiliary request: allowability of amendments

3.1 Feature [1.1.1] "*a liner assembly (14) comprising a main liner member (38) at least partially surrounding the main bladder tube (34) and a lateral liner tube (40)*" of claim 1 was disputed as extending beyond the content of the earlier application as filed (document D0).

3.2 The appellant cited page 4, line 31 to page 5, line 2 and Figures 1 to 3 of document D0 as basis for feature [1.1.1]. This passage reads as follows: "*Similarly, the T-shaped or Y-shaped liner assembly 14 includes a main liner tube 38 and a lateral liner tube 40. The bladder assembly 16 is fitted on the interior of the liner assembly 14.*" However, this passage and Figures 1 to 3 of document D0 refer to a main liner tube, while feature [1.1.1] refers to a main liner member. As can be seen from dependent claims 3 and 9 of document D0, according to which the main liner member is formed as a tube, "main liner tube" and "main liner member" are not

used synonymously in the earlier application. Rather, "main liner member" constitutes the general disclosure in document D0, while "main liner tube" is the specific disclosure. Therefore, the above cited passage and Figures 1 to 3 of document D0 referring to the specific disclosure "main liner tube" do not directly and unambiguously disclose feature [1.1.1] directed at the general wording "main liner member".

In that respect, the appellant argued that the main liner member and the main liner tube were functional equivalents. However, even if this were true, arguing that an amended claim feature was functionally equivalent to an originally disclosed feature is not sufficient for proving a direct and unambiguous disclosure.

3.3 Moreover, in the present case the board understands the term "partially surrounding" in the circumferential and not the longitudinal direction. Thus, a partial surrounding of the main bladder tube is neither implied by the term "is fitted on" nor shown by the figures of document D0.

3.4 Conclusion on allowability of amendments in the first auxiliary request

The subject-matter of claim 1 of the first auxiliary request does not fulfil the requirements of Article 76(1) EPC.

4. Second auxiliary request: allowability of amendments

Claim 1 of the second auxiliary request equally contains the amended feature "a liner assembly (14) comprising a main liner member (38) at least partially

surrounding the main bladder tube (34) and a lateral liner tube (40)" of claim 1 of the first auxiliary request. Thus, the subject-matter of claim 1 of the second auxiliary request does not fulfil the requirements of Article 76(1) EPC for the same reasons as set out above for claim 1 of the first auxiliary request.

5. Third auxiliary request: admittance

5.1 In the case in hand, the summons to oral proceedings was notified after the date on which the revised version of the Rules of Procedure of the Boards of Appeal (RPBA 2020, OJ EPO 2019, A63) entered into force, i.e. 1 January 2020 (see Article 24(1) RPBA 2020). Thus, in accordance with Article 25(3), Article 13(2) RPBA 2020 applies.

5.2 The appellant filed this request during the oral proceedings before the board as a reaction to the respondent's arguments on the allowability of feature [1.1.1] presented at a very late stage, i.e. after the board's communication and during the oral proceedings before the board. In particular, the appellant referred to the fact that the respondent raised the issue of the distinction between "main liner member" and "main liner tube" in the disclosure of document D0 for the first time during the oral proceedings before the board. Also the difference between US and European pipeline joints were outlined only during the oral proceedings before the board. This late development of the respondent's arguments presented in the letter of 31 March 2022, led the board to the conclusion - departing from that expressed in its preliminary opinion (see communication under Article 15(1) RPBA 2020, point 10.3.1) - that the

first and the second auxiliary requests did not meet the requirements of Article 76(1) EPC.

- 5.3 Under these exceptional circumstances, the board is satisfied that the appellant justified the filing of the third auxiliary request with cogent reasons within the meaning of Article 13(2) RPBA 2020. On account of the principles set out in Article 13(1) RPBA 2020, the board is also satisfied that the third auxiliary request does not involve new subject-matter to be discussed and is therefore not detrimental to procedural economy.

In view of the above, the board exercised its discretion in accordance with Article 13(2) RPBA 2020 and decided to admit the appellant's third auxiliary request into the appeal proceedings.

6. Third auxiliary request: allowability of amendments
- 6.1 The amended feature [9.1.1] of claim 1 reads as follows: "*a liner assembly (14) comprising a main liner tube (38) surrounding the main bladder tube (34) and a lateral liner tube (40)*". The appellant cited page 4, line 31 to page 5, line 2 and Figures 1 to 3 of document D0 as basis for this feature.
- 6.2 According to this text passage, the bladder assembly, comprising a main bladder tube and a lateral bladder tube, is fitted on the interior of the liner assembly which comprises a main liner tube and a lateral liner tube. However, it cannot be directly and unambiguously derived from this disclosure that the main liner tube is surrounding the main bladder tube. The term "fitted on" is not synonymous with the term "surrounding". Figures 1 to 3 (as well as related Figures 4 to 6) of

document D0 and the corresponding parts of the description show that the main liner tube surrounds the main bladder tube, but only when the edges of the main liner tube overlap, as specifically shown in Figure 1 (or 4). Since this limitation is missing from claim 1 of the third auxiliary request, there is an unallowable intermediate generalisation of the disclosure of document D0.

6.3 Conclusion on allowability of amendments in the third auxiliary request

The subject-matter of claim 1 of the third auxiliary request does not fulfil the requirements of Article 76(1) EPC.

7. Overall conclusion

Since none of the appellant's requests is allowable, the appeal has to be dismissed.

Order

For these reasons it is decided that:

1. The appeal is admissible.
2. The appeal is dismissed.

The Registrar:

The Chairman:



N. Schneider

P. Lanz

Decision electronically authenticated