

Internal distribution code:

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

**Datasheet for the decision
of 10 November 2015**

Case Number: T 1121/14 - 3.2.08

Application Number: 06841276.6

Publication Number: 1954953

IPC: F16B33/06, F16L15/00, F16L58/18

Language of the proceedings: EN

Title of invention:
THREADED CONNECTIONS WITH HIGH AND LOW FRICTION COATINGS

Patent Proprietor:
Tenaris Connections Limited

Opponents:
VALLOUREC OIL AND GAS FRANCE
TI Automotive (Heidelberg) GmbH

Headword:

Relevant legal provisions:
EPC Art. 123(2), 100(c)

Keyword:
Amendments - added subject-matter (yes)

Decisions cited:
G 0001/93

Catchword:



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1121/14 - 3.2.08

D E C I S I O N
of Technical Board of Appeal 3.2.08
of 10 November 2015

Appellant: Tenaris Connections Limited
(Patent Proprietor) 112 Bonadie Street
Kingstown (VC)

Representative: Cinquantini, Bruno
Notarbartolo & Gervasi S.p.A.
Corso di Porta Vittoria, 9
20122 Milano (IT)

Respondent: VALLOUREC OIL AND GAS FRANCE
(Opponent 1) 54 rue Anatole France
59620 Aulnoye-Aymeries (FR)

Representative: Marsolais, Richard
Vallourec & Mannesmann Tubes
Département Propriété Industrielle
27, avenue du Général Leclerc
92100 Boulogne-Billancourt (FR)

Respondent: TI Automotive (Heidelberg) GmbH
(Opponent 2) Dischinger Strasse 11
69123 Heidelberg (DE)

Representative: Rohmann, Michael
Andrejewski - Honke
Patent- und Rechtsanwälte
An der Reichsbank 8
DE-45127 Essen (DE)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 21 March 2014
revoking European patent No. 1954953 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairman M. Alvazzi Delfrate
Members: M. Foulger
 I. Beckedorf

Summary of Facts and Submissions

I. The appellant (patent proprietor) lodged an appeal against the decision of the opposition division, dispatched on 21 March 2014, revoking European patent no. 1 954 953.

The opposition division found that the subject-matter of claim 1 of both requests then on file contained subject-matter which extended beyond the content of the application as originally filed (Article 100(c) EPC).

II. The notice of appeal and the statement setting out the grounds of appeal were filed within the given time limits and in due form.

III. Oral proceedings took place before the Board of Appeal on 10 November 2015.

IV. The appellant requested that the decision under appeal be set aside and that the patent be maintained as granted,
or, in the alternative,
that the patent be maintained in amended form on the basis of one of the sets of claims filed as auxiliary request 1 and 2 with letter of 30 July 2014.

V. The respondents 1 and 2 (opponents 1 and 2 respectively) requested that the appeal be rejected.

VI. Claim 1 of the main request reads as follows:

"A threaded joint for pipes, the joint comprising a pin (100) and box (200) members, the pin member (100) having a thread adapted to match a thread of the box member, a thread form of each of the pin member (100)

and the box (200) member being defined by a thread profile that lays on a cross-section containing a longitudinal axis (X) of the joint, wherein the surface of the pin member is provided with a coating comprising a first layer (12, 12', 24) with high friction property laid on the overall surface of the pin member (100), a second layer (13, 13', 25) with low friction properties lower than the friction properties of the first layer characterised in that said first layer has anti-seize property and said second layer is laid only on first portions of the overall surfaces of pin (100) or box (200) members, wherein the first portions are parts of the surface that produce reciprocal radial contact between pin and box during make-up until an abutment surface withstanding an axial contact pressure load abut."

The characterising part of claim 1 of the first auxiliary request was amended with regard to the main request as follows (additions underlined, deletions crossed through):

"said first layer has anti-seize property and said second layer is laid only on ~~first portions of the overall surfaces of pin (100) or box (200) members,~~ crests in the box member, roots in the pin member and metal-to-metal seals wherein the first portions which are parts of the surface that produce reciprocal radial contact between pin and box during make-up until an abutment surface withstanding an axial contact pressure load abut."

The characterising part of claim 1 of the second auxiliary request was amended with regard to the main request as follows (additions underlined, deletions crossed through):

"said first layer has anti-seize property and said second layer is laid only on first portions of the overall surfaces of pin (100) or box (200) members, wherein the first portions are ~~parts of the surface~~ thread crests (14), lead-in flanks (14') and roots (14") that produce reciprocal radial contact between pin and box during make-up until an abutment surface withstanding an axial contact pressure load abut, whereas the first layer remains as the unique layer on thread load flanks (15), on abutment shoulder and nose area (19)."

VII. The appellant argued essentially the following:

a) Late-filed evidence

The late-filed evidence submitted by the appellant, i.e. videos on DVD, US 6,705,648 B1 and the catalogue VAM running Book 2001, served to illustrate the knowledge of the skilled person regarding which parts of the threads came into radial contact during make-up.

b) Main request

Claim 1 as granted was based on claims 1 and 5 as originally filed with the insertion of the word "only". For the following reasons the addition of the word "only" did not add any subject-matter which extended beyond the content of the application as filed:

i) During make-up of the threaded joint there were two distinct phases. These were shown in Figure 4 of the patent. The first phase with relatively low torque was up to the shoulder ST. The second phase was the relatively steeper section. The claim concerned the

first phase because of the final feature whereby "during make-up until an abutment surface withstanding an axial contact pressure abut".

It was therefore clear to the person skilled in the art which surfaces should be provided with the second layer and also which surfaces should not be provided with the second layer, in order to arrive at the graph shown in Figure 4 of the application.

Moreover, the application, paragraph [0041], explained that according to the invention, different surfaces had different friction factors.

ii) In the application as originally filed, the second layer was laid on "specific parts" of the surfaces of the pin or box members. Specific had the meaning of relating uniquely and therefore the second coating was uniquely, i.e. only, to be found on the parts which produced reciprocal radial contact.

Figures 3a,b showed that the second layer was provided on all surfaces in reciprocal radial contact during make-up, i.e. 14,14',14". Figure 1a was very schematic in nature and could not be relied on to show where there was contact because this figure was merely there to illustrate the loading on the joint as shown by the thick arrows 6' and 6".

Paragraph [0039] disclosed that the first layer "remains as the unique layer" on the thread load flanks and the nose area.

Applying the novelty test to assess the allowability of an amendment led to the conclusion that the modified claim was not new over the originally filed

application. Hence the amendment was allowable according to this test.

iii) According to G1/93 (OJ EPO,1994,541) an undisclosed feature may be considered as not extending beyond the content of the application as originally filed if it merely limits the scope of protection. In the current case the claim had been amended to exclude protection for the hypothetical case where the second layer was on all surfaces. Therefore by merely excluding protection for these hypothetical embodiments the amendment complied with the principles set out in G1/93.

Given the above, the amendments made before grant have not extended the subject-matter of claim 1 beyond that of the application as originally filed.

c) First and second auxiliary requests.

The claims of these requests were based on further features taken from paragraph [0041] of the application as originally filed and helped to further define the parts with reciprocal radial contact.

VIII. The respondents argued essentially the following:

a) Late-filed evidence

The late-filed evidence submitted by the respondents, i.e. GB 1 428 433 A (P-D1-4), US 4,692,988 A (O2-D1), served to illustrate that other thread arrangements were possible and that to determine which areas came into reciprocal radial contact required details of both male and female threads.

b) Main request

i) Figures 1a and b showed a clearance between the stabbing flanks i.e. there was no radial reciprocal contact. Figure 3a on the other hand showed that the second coating was applied to the stabbing flank. Therefore there was no unambiguous disclosure as to what should constitute a surface with radial reciprocal contact and consequently there was no unambiguous disclosure of the second coating being applied only to these surfaces.

ii) Figures 3a and b could not give any information concerning reciprocal radial contact because only the casing was shown. Moreover, documents JP 2002-327874 A (O1-D1) and JP 10-267175 A (O1-D2) showed that other arrangements to that described in the patent were possible.

iii) G1/93 was not relevant because the modification was technical in nature due to the coating changing the amount of torque that needed to be applied to the connection.

c) First and second auxiliary requests.

The claims of these requests also contained the limitation that the second coating was "only" on certain areas. Consequently these requests were not allowable for the same reasons as for the main request.

Reasons for the Decision

1. Admittance of late-filed evidence

All parties to the appeal proceedings have referred to evidence was either submitted for the first time in appeal although it could have been presented in opposition proceedings or was filed in appeal after the filing of the statement of grounds of appeal and the reply thereto. This included the videos filed on DVD with the letter dated 12 October 2015, documents US 6,705,648 B1, P-D1-4, O2-D1 and the catalogue VAM Running Book 2001. It is therefore within the Boards discretion to consider this evidence (Article 12(4) and 13 RPBA). The Board decided not to admit this evidence into the proceedings because it was either not suitable to illustrate the common general knowledge of the person skilled in the art in a manner which would have a bearing on the outcome of the appeal (videos, US 6,705,648 B1 and catalogue) or was submitted at an extremely late stage, i.e. at the oral proceedings, without good reason (P-D1-4 and O2-D1).

2. Main request

2.1 During the pre-grant examination proceedings claim 1 had been amended by incorporating the features of claim 5 and by introducing the word "only". Consequently, the second layer with low friction properties is laid only on first portions of the overall surfaces of pin or box members, wherein the first portions are parts of the surface that produce reciprocal radial contact between pin and box during make-up until an abutment surface withstanding an axial contact pressure load abut. It is the basis for this latter modification that is in

- dispute, in particular whether the original application disclosed that the second layer is not provided on surfaces which are not in reciprocal radial contact during said phase of the make-up.
- 2.2 Because Figures 3a and b only show parts of either the box member (Figure 3a) or only the pin member (Figure 3b), then they cannot show which areas come into reciprocal radial contact. Also Figure 4 of the application, although illustrating the general principles of the invention, does not contain any specific information as to which surfaces should be coated. Thus the drawings do not disclose the feature that the second layer is only on said first portions of the overall surfaces.
- 2.3 It is true that the description mentions areas where the second layer is applied and areas where it is not applied. However there is no indication that the second layer is laid exclusively on the first portions defined in claim 1. Moreover the teaching of the description is not consistent because on the one hand the axial contact surfaces should not be provided with the second layer (see paragraphs [0046],[0052]). On the other hand, however, the lead in flanks 14' which do enter into axial contact are provided with the second layer. Thus the description does not provide an unambiguous disclosure of the provision of the second layer "only" on said first portions.
- 2.4 The argument that "specific" in originally filed claim 5 is synonymous with "only" is not persuasive. As may be seen from the dictionary definition provided by the appellant, specific can indeed have the meaning of relating uniquely to a particular subject however it can also mean "clearly defined or identified", see

extract from the Oxford English Dictionary filed on 30 July 2014 by the Appellant. As the meaning of the word is in itself not unambiguous then it cannot provide an unambiguous disclosure of the term "only".

Thus the feature of claim 1 whereby the second layer is laid only on first portions of pin or box members, as defined in claim 1, is not disclosed in the application as originally filed.

- 2.5 G1/93, Point 2 of the Order, states that a feature which has not been disclosed in the application as filed but which has been added to the application during examination and which, without providing a technical contribution to the subject-matter of the claimed invention, merely limits the protection conferred by the patent as granted by excluding protection for part of the subject-matter of the claimed invention as covered by the application as filed, is not to be considered as subject-matter which extends beyond the content of the application as originally filed within the meaning of Article 123(2) EPC. However, in the current case, the added feature does indeed make a technical contribution to the invention in that it determines the friction properties of the surfaces of pin and box members and thereby possibly changes the amount of torque required during the make-up operation. Therefore, the exception set out in G1/93 does not apply to this particular case and the added subject-matter must be considered as being subject-matter which extends beyond the content of the application as originally filed because, as set out above, it has been found not to have been disclosed in the application as filed.

2.6 Therefore the main request is not allowable on the grounds of Article 100(c) EPC.

3. First and second auxiliary requests

Claim 1 of the first and second auxiliary requests also contains the feature whereby the second layer is laid only on portions of pin or box members that produce reciprocal radial contact between pin and box during make-up until an abutment surfaces withstanding an axial contact pressure load abut. Therefore, also in this case, the claim comprises the feature, which was not originally disclosed, that the surfaces which do not produce said radial contact do not exhibit the second layer. This fact is not changed by the added features which merely list the surfaces which are provided with the second layer. Thus the subject-matter of claim 1 according to first and second auxiliary requests also extends beyond that of the application as originally filed for the reasons given above. Therefore, these requests are also not allowable (Article 123(2) EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



C. Moser

M. Alvazzi Delfrate

Decision electronically authenticated