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**Datasheet for the decision
of 9 September 2020**

Case Number: T 1774/17 - 3.2.08

Application Number: 10012461.9

Publication Number: 2275692

IPC: F16B37/04, F16B19/10, F16B33/00

Language of the proceedings: EN

Title of invention:
METHOD FOR USING AN EXPANDABLE COLLET ANCHOR SYSTEM

Patent Proprietor:
Centrix Inc.

Opponent:
Lisi Aerospace

Headword:

Relevant legal provisions:
EPC Art. 100(b), 100(a), 56, 76(1), 123(2)
RPBA 2020 Art. 13(2)

Keyword:

Grounds for opposition - insufficiency of disclosure (no) -
extension of subject-matter (no)
Inventive step - (yes)
Amendments to a party's case - admitted (yes) / (no)

Decisions cited:

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1774/17 - 3.2.08

D E C I S I O N
of Technical Board of Appeal 3.2.08
of 9 September 2020

Appellant: Centrix Inc.
(Patent Proprietor) 1022 West Valley Highway
Kent, WA 98032 (US)

Representative: DTS Patent- und Rechtsanwälte
Schneckenbühl und Partner mbB
Marstallstrasse 8
80539 München (DE)

Appellant: Lisi Aerospace
(Opponent) 14/16, rue Saint-Hilaire
ZI du Vert Galant
95310 Saint-Ouen-l'Aumône (FR)

Representative: Ipside
7-9 Allées Haussmann
33300 Bordeaux Cedex (FR)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
21 June 2017 concerning maintenance of the
European Patent No. 2275692 in amended form.**

Composition of the Board:

Chairman C. Herberhold
Members: M. Foulger
Y. Podbielski

Summary of Facts and Submissions

- I. With the decision posted on 21 June 2017, the opposition division decided that the patent, and the invention to which it related, according to the then valid 6th auxiliary request met the requirements of the EPC.
- II. The proprietor and the opponent filed appeals against this decision.
- III. Oral proceedings took place before the Board on 9 September 2020.
- IV. The appellant (opponent) requests that the decision under appeal be set aside and the patent be revoked.
- V. The appellant (proprietor) requests that the decision under appeal be set aside and the patent be maintained in amended form according to the main request filed as auxiliary request 2 during the oral proceedings.
- VI. Claim 1 of the main request reads:

"A method for removably fastening together at least a first or proximal object and a second or distal object with a collet body (20) wherein the collet body (20) comprises a first end (30) defining a generally circular opening; a first wall portion (32) adjacent to the first end (30), the first wall portion (32) having an interior surface (22), an exterior surface (24), a progressing radial profile and defining at least two secondary slots (36) extending longitudinally from the first end (30) to thereby create at least two fingers (36) having a distal end at the first end (30); a

second end (60) defining a generally circular opening; a second wall portion (62) adjacent to the second end (60), the second wall portion (62) having an interior surface and an exterior surface; an annular protrusion extending from the first wall portion (32) having a leading face (42) and a trailing face (44); and a collet body (20) anti-rotation means for engaging with a mechanical ground of an auxiliary structure (110), wherein the auxiliary structure is a sleeve (90) and wherein first and second surfaces as well as an interior sectional surface of each object define a hole having an axis, and wherein the holes have generally equal diameters and are in substantial axial alignment, the method comprising:

- a) inserting the collet body first end (30) through both object holes and the collet body second end (60) through at least a portion of the first or proximal object hole;
- b) engaging the collet body anti-rotation means with the mechanical ground of the auxiliary structure, whereby free rotation of the collet body (20) is substantially prevented by the rotational, but not axial, interference of the collet body anti-rotation means with the auxiliary structure; and
- c) retracting the collet body before, while or after presenting a radially outward force at a portion of the interior surface (22) of the first wall portion (32) by a threaded stud (80)."

VII. The following documents are referred to in this decision:

D1: US 2,379,786 A

D6: JP-H1151018

D6a: Translation of D6 (filed 12 December 2014)

VIII. The appellant (opponent) argued essentially the following:

a) Admission of the main request

There was no objection to the admission of this request.

b) Sufficiency of disclosure (Article 100(b) EPC)

There was a fundamental contradiction in the feature whereby free rotation of the collet body was substantially prevented by the rotational, but not axial, interference of the collet body anti-rotation means with the auxiliary structure. According to the claim, the collet had rotational interference but no axial interference. The threaded stud applied a torque in order to move axially into the collet. However applying such a torque also inevitably generated a frictional force which opposed the axial displacement of the collet body.

As the description did not explain how these apparently contradictory requirements were realised, the skilled person was not in a position to carry out the invention.

b) Added subject-matter

i) Objection raised during the oral proceedings in the context of the main request

The feature whereby the auxiliary structure was a sleeve was not, as such, disclosed in the application as filed because this only disclosed a "sleeve insert". The subject-matter of claim 1 extended beyond that of

the application as filed.

ii) Objection raised in the context of now abandoned requests

The feature of step c "retracting the collet body before, while or after" was not disclosed in the originally filed application. In particular, this feature combined aspects from different embodiments and was thus not disclosed.

c) Inventive step

The argument based on the combination of the teachings of D1 and D6 was to be admitted because it had already been raised in the statement setting out the grounds of appeal against the then valid request.

D1 was the closest prior art and disclosed a fastener with all the features of claim 1 except the sleeve.

The objective technical problem was to improve the fixation of the collet in the structure.

D6 dealt with this problem and suggested using a sleeve to better retain the collet.

The skilled person would therefore have applied this teaching to the fastener known from D1 and would thereby have arrived at the subject-matter of claim 1 without the exercise of inventive activity.

IX. The appellant (proprietor) argued essentially the following:

a) Admission of the main request

The request was filed in response to developments during the oral proceedings and was therefore to be admitted.

b) Sufficiency of disclosure (Article 100(b) EPC)

The patent set out in paragraph [0042] how free rotation of the collet body was prevented. Moreover, in Figs. 14 and 16 the axial translation of the stud was illustrated.

c) Objection of added subject-matter

i) Objection raised during the oral proceedings in the context of the main request

The further objection relating to the sleeve should have been filed with the response to the proprietor's appeal where this feature was included in the second auxiliary request filed therewith. It was raised for the first time during the oral proceedings before the Board and was therefore late-filed and should be disregarded.

Moreover, this objection was *prima facie* not persuasive because the claim clearly specified a sleeve which was inserted. Thus, there was effectively no difference compared to the "sleeve insert" of the originally filed application.

ii) Objection raised in the context of now abandoned requests

Basis for the phrase "retracting the collet body before, while or after" was to be found on p. 17, l. 26 - p. 18, l. 25 of the application as originally filed. P. 18, l. 16 explicitly disclosed "before or during". Moreover, there was a disclosure of "after" in Figs. 15 and 16 where the collet was pushed downwards then the stud inserted and the collet retracted.

At p. 17, l. 1 - 9 it was explained that depending on whether the stud threads are continuous, the collet interior surface may or may not have other than a smooth surface.

Thus, the subject-matter of claim 1 did not extend beyond that of the originally filed application.

c) Inventive step

The inventive step objection raised based on the teachings of D1 combined with those of D6 should have been raised earlier and hence should not be admitted.

D1 dealt with a fastener used to join two plates together. The fastener comprised a screw 32 and a collet 10. The serrations on the collet formed keys whereby the rotation of the collet was prevented (see p. 2, l.h. col., l. 8 - 11).

If D1 could indeed be regarded as closest prior art, the subject-matter of claim 1 differed at least in that the auxiliary structure was a sleeve.

A sleeve, if provided, would perhaps prevent damage to the inner surface. This was however exactly the opposite of what D1 was aiming for, i.e. a positive engagement of the collet with the interior of the

through holes.

Thus, the teaching of D1 went against using an intermediate sleeve and in consequence the skilled person would not have considered either D6 or the common general knowledge when seeking to solve the above problem.

Hence, the subject-matter of claim 1 involved an inventive step.

Reasons for the Decision

1. Admission of main request

According to Article 13(2) RPBA 2020, the Board shall not in principle admit changes to a party's case after the summons to oral proceedings has been sent, unless there are special circumstances justified by the party.

In the current case, earlier in the oral proceedings the Board had accepted a new request (auxiliary request 1A) into the proceedings in order to overcome an Article 123(2) EPC objection. The appellant (opponent) did not object to the admission of that request. The single-word amendment merely made explicit a feature which the opposition division had already explicitly considered to be implicit (see point 16 of the impugned decision) such that auxiliary request 1A did not change the meaning of the request on which the decision under appeal was based. The current main request applied the same single-word amendment to the requests filed with the statement setting out the grounds of appeal.

Given the nature of the amendment and the fact that the appellant (opponent) did not object to the admission of this request the Board, in this particular case, decided to admit the request.

2. Sufficiency of disclosure

The claim specifies that free rotation of the collet body is substantially prevented by the rotational, but not axial, interference of the collet body anti-rotation means with the auxiliary structure.

The appellant (opponent) is correct insofar as preventing rotation, whilst not at all impeding axial movement, is not described in the patent. However, the patent sets out how free rotation of the collet body is prevented, in paragraph [0042] it is stated that "[t]he collet body is prevented from rotating ... by the physical interaction between the collet body flared hex and the grooves of insert sleeve 80". In paragraph [0043] it continues "[a]s shown in Fig. 14 and 16, stud 80 will continue translating towards and past first end 30...". The collet body is thus guided by the sleeve grooves without substantial axial interference which corresponds what the skilled person would understand as being the meaning of the claimed feature.

Hence, the patent discloses the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

3. Added subject-matter - Articles 76(1) and 123(2) EPC

3.1 The patent is based on a divisional application. The description as originally filed essentially corresponds to the description of the earlier application as originally filed. The arguments as to Article 123(2) thus apply likewise to the requirements of Article 76(1) EPC.

3.2 Objections raised during the oral proceedings against the original disclosure of the main request

The appellant (opponent) objected during the oral proceedings to the feature wherein the auxiliary structure is a sleeve, on the grounds that this was a generalisation of the disclosed "sleeve insert" (cf.

claim 3 of the patent).

This amendment had been introduced by the appellant (proprietor) in auxiliary request 2 filed on 27 October 2017 with the statement setting out the grounds of appeal. The appellant (opponent) had the opportunity to reply to this appeal. It did not however do so.

This objection, raised in the oral proceedings, is therefore a change in the appellant (opponent)'s case. According to Article 13(2) RPBA 2020, the Board may only permit this under "exceptional circumstances". The Board can neither recognise any such exceptional circumstance nor has the appellant (opponent) argued what these could be and hence the Board decided not to take the objection into account pursuant to Article 13(2) RPBA 2020. The Board wishes to add that the objection is furthermore *prima facie* not convincing as claim 1 clearly specifies a sleeve which is inserted, i.e. a sleeve insert.

3.3 Objections raised in the context of now abandoned requests

Some objections were raised in the context of the discussion of requests which have now been abandoned. They are however still relevant in respect to the present request which includes the features concerned.

The phrase "retracting the collet body before, while or after" was added in examination proceedings. Basis for this amendment may be found on p. 17, l. 26 - p. 18, l. 25 of the application as originally filed. However, this is, as argued by the appellant (opponent), in relation to two specific embodiments (Figs. 13, 14 and

Figs. 14, 16). In these embodiments a threaded stud - as now claimed - is used in order to retract the collet body. P. 18, l. 16 explicitly mentions "before or during". Moreover, there is a disclosure of "after" in Figs. 15 and 16 where the collet is pushed downwards then the stud inserted and the collet retracted.

Thus, a retraction of the collet body before, while or after was disclosed in the application as originally filed.

The Board is also persuaded that the threaded stud is disclosed in isolation from a threaded portion of the collet body interior surface (cf. claim 5 as originally filed). At p. 17, l. 1 - 9 it is explained that depending on whether the stud threads are continuous, the collet interior surface may or may not have other than a smooth surface. Thus at least some embodiments of the invention do not have threads on the collet interior surface.

Hence, the requirements of Article 123(2) EPC are met.

4. Inventive step

4.1 Admission of the attack based on D1 and D6

The request under consideration was filed during the oral proceedings and so, strictly, the appellant (opponent) could not have attacked this in the statement setting out the grounds of appeal. However, in said statement, the appellant (opponent) had filed attacks based on the combination of the teachings of D1 and D6 against a different request. Hence, this attack was not a change in the appellant (opponent)'s case. Therefore, the Board did not regard it as inadmissible.

4.2 D1 discloses a fastener which is adapted to dowel and fill the holes through which it extends (D1, p. 1, l. 7 - 9). The sleeve 10, equating to the collet in the language of the claim, is serrated; the serrations forming keys to prevent rotation of the sleeve (p. 2, l. h. column, l. 10). In set position, the serrations bite into the adjacent plate - which may be seen as the auxiliary structure claimed - thus securing the sleeve (p. 2, l. h. column, l. 12 - 20).

Taking D1 as the closest prior art as argued by the appellant (opponent), the method of claim 1 differs from the method disclosed therein at least in that the auxiliary structure is a sleeve.

The problem to be solved is to facilitate the attachment of the two objects (see patent paragraph [0032]).

D6 provides a sleeve, Fig. 1, item 13, the purpose of which is to align the plates by receiving load applied to the direction to deviate an axis of the connection hole (see English abstract, D6a).

The Board considers that, even considering the teaching of D6, the skilled person would not apply a sleeve to the fastener disclosed in D1. D1 teaches that the collet should bite into the plate structure in order to prevent its rotation (see above). Introducing a sleeve between collet and plate structure in D1 would mean that the collet was keyed to the sleeve but that the sleeve itself was not constrained from rotating. Such a modification would thus go against the teaching of D1 and the skilled person would not do this without the exercise of inventive activity.

Hence, the subject-matter of claim 1 involves an inventive step.

5. No objection was raised against the amended description nor does the Board see reasons to raise one.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain the patent in the following version:
 - Claims 1-11 of the main request filed as auxiliary request 2 during the oral proceedings on 9 September 2020,
 - Description: columns 1-14 filed during the oral proceedings on 9 September 2020,
 - Figures 1-26 of the patent specification.

The Registrar:

The Chairman:



D. Magliano

C. Herberhold

Decision electronically authenticated