# BESCHWERDEKAMMERN PATENTAMTS

# BOARDS OF APPEAL OF OFFICE

CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPÉEN DES BREVETS

#### Internal distribution code:

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

# Datasheet for the decision of 18 March 2024

Case Number: T 0942/22 - 3.4.02

Application Number: 14820738.4

Publication Number: 3155389

G01L1/24, G01L1/22, G01L5/22, IPC:

G01L1/14

Language of the proceedings: ΕN

#### Title of invention:

LOAD CELL HAVING AN ELASTIC BODY

### Patent Proprietor:

EILERSEN, Nils Aage Juul

#### Opponent:

Mettler-Toledo GmbH

#### Headword:

## Relevant legal provisions:

EPC Art. 123(2), 123(3)

# Keyword:

Amendments - extension beyond the content of the application as filed (yes) - extension of protection conferred by patent (yes)

# Decisions cited:

T 0108/91, T 0314/03

# 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 0942/22 - 3.4.02

DECISION
of Technical Board of Appeal 3.4.02
of 18 March 2024

Appellant: EILERSEN, Nils Aage Juul

(Patent Proprietor) Goengehusvej 226 2950 Vedbaek (DK)

Representative: Dragsted Partners A/S

Rådhuspladsen 16 1550 Copenhagen V (DK)

Respondent: Mettler-Toledo GmbH
(Opponent) Im Langacher 44
8606 Greifensee (CH)

Representative: Werner, Patrick

Leinweber & Zimmermann Patentanwalts-PartG mbB

Viktualienmarkt 8 80331 München (DE)

Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 14 February 2022 revoking European patent No. 3155389

pursuant to Article 101(3)(b) EPC.

# Composition of the Board:

Chairman R. Bekkering
Members: A. Hornung

C. Almberg

- 1 - T 0942/22

# Summary of Facts and Submissions

The patentee appealed against the decision of the opposition division revoking European patent No. 3 155 389.

Opposition had been filed against the patent as a whole and based on the grounds for opposition of Article 100(a), together with Article 56 EPC, Article 100(b) EPC and Article 100(c) EPC.

The opposition division held that the grounds for opposition provided in Article 100(c) EPC prejudiced maintenance of the patent as granted. Moreover, the opposition division decided that all the auxiliary requests then on file failed to meet the requirement of Article 123(2) or (3) EPC.

- II. The patentee requests that the decision under appeal be set aside and that the patent be upheld as granted (main request) or, as an auxiliary measure, be maintained on the basis of the claims according to one of a first to third auxiliary request filed with the statement of grounds of appeal. The first auxiliary request is identical to the fifth auxiliary request underlying the appealed decision. The second auxiliary request is identical to the fourth auxiliary request underlying the appealed decision. The third auxiliary request is filed for the first time with the patentee's statement of the grounds of appeal.
- III. In response to the patentee's statement of grounds of appeal, the opponent (respondent) argued that all the patentee's requests on file failed to meet the requirement of Article 123(2) or (3) EPC.

- 2 - T 0942/22

- IV. None of the parties requested oral proceedings to be held.
- V. The parties' written submissions are designated P1 and O1 as follows:

P1: patentee's statement of grounds of appeal,

O1: opponent's letter of reply, dated 2 November 2022.

VI. Independent claim 1 according to the patentee's main request reads as follows (the features of the characterising portion are preceded by the numbering A to C, as defined in the appealed decision, page 7):

"A load cell comprising

an elastic body where the elastic body comprises a first beam and a second beam that is positioned opposite to the first beam, a base end and a load receiving end that is positioned opposite the base end where the first and the second beams are connected to the base end and to the load receiving end via flexure points that provide sections adapted to be elastically deformed and

a cavity comprising sensor means for measuring the elastic deformation of the elastic body in response to the load to be measured and a flexible wall and

wherein the cavity is placed in the first beam and/or the second beam with the flexible wall and sensor means placed in the body of the beam between the flexure points of the beam and

the load cell further comprises

a lever having a first end and second end, where the first end is connected to a flexible wall of the cavity and the second end is connected to one or more of the opposite - 3 - T 0942/22

beam, the base end or the load receiving end, in order to transform any relative movement of the second end of the lever into deformations of the flexible wall in response to the load to be measured,

characterized in that

A: the cavity comprises solid side walls adapted to absorb longitudinal forces in the beams on each side of the cavity,

**B**: wherein the flexible wall is adapted to seal the cavity and to protect the sensor means from humidity and corrosion, and

C: wherein the lever which is connected to the flexible wall of the sealed cavity is adapted to activate the sensor means in the sealed cavity by deforming the flexible walls".

Independent claim 1 according to the first auxiliary request differs from claim 1 of the main request in that features  ${\bf A}$  and  ${\bf C}$  of the characterising portion have been amended and read as follows:

A: "the cavity comprises solid side walls on each side of the cavity adapted to absorb longitudinal forces in the beams without the flexible wall and sensor means being influenced and reducing errors from changing eccentricity of the load applied to the load cell" and

**C:** "wherein the lever which is connected to the flexible wall of the sealed cavity is adapted to activate the sensor means in the sealed cavity by deforming the flexible wall".

- 4 - T 0942/22

Independent claim 1 according to the second auxiliary request differs from claim 1 of the main request in that feature  ${\bf C}$  of the characterising portion has been amended in the same way as in claim 1 of the first auxiliary request, i.e. the word "walls" has been changed to "wall".

Independent claim 1 according to the third auxiliary request differs from claim 1 of the main request in that the expression "and/or" has been changed to "and".

#### Reasons for the Decision

1. Main request

The subject-matter of claim 1 extends beyond the content of the application as filed (Article 100 (c) EPC).

- 1.1 The characterising portion of claim 1 consists of the following features  ${\bf A}$  to  ${\bf C}$ :
  - A: the cavity comprises solid side walls adapted to absorb longitudinal forces in the beams on each side of the cavity,
  - **B:** wherein the flexible wall is adapted to seal the cavity and to protect the sensor means from humidity and corrosion, and
  - **C:** wherein the lever which is connected to the flexible wall of the sealed cavity is adapted to activate the sensor means in the sealed cavity by deforming the flexible walls.
- 1.2 The expressions "the lever" and "walls" in feature  ${\bf C}$  implies that feature  ${\bf C}$  covers an embodiment of the load

cell in which a single lever is adapted to deform a plurality of flexible walls. However, as stated in the appealed decision, page 12, fourth paragraph, the application as originally filed, irrespective of whether a cavity is placed in the first and second beam or only in one of the beams, "does not disclose any embodiment [...], wherein the load cell has a single lever and wherein this single lever deforms two cavities".

Therefore, "feature C extends the subject-matter of claim 1 beyond the disclosure of [the application as originally filed]" (appealed decision, page 12, last paragraph).

# 1.3 Patentee's counter-arguments

1.3.1 According to the appealed decision, the patentee submitted that "[t]he skilled person reading claim 1 with a mind willing to understand would understand that a single lever deforms a single flexible wall" (appealed decision, page 10, penultimate paragraph). Furthermore, [...] "[a]ll the embodiments (see Fig. 4, 6 and 8) show a single lever deforming a single flexible wall" (appealed decision, page 10, last paragraph). The patentee concluded that "when reading feature C in the light of the description and drawings of [sic] Patent in suit, the skilled person would understand that the plural 'walls' should be read as singular" (appealed decision, page 11, second paragraph).

The board cannot follow the patentee's argument consisting essentially in arguing that the skilled person would recognize that the plural term "walls" in feature  $\mathbf{C}$  is an error, and automatically correct this error. Indeed, as argued by the opposition division, "[i]n the AND variant, there are two cavities and therefore two flexible walls. Therefore the plural 'walls' in feature C is meaningful in the context of claim 1. [...] Therefore the skilled person

would not regard the plural 'walls' in feature C as a lack of clarity but rather as a limitative feature" (appealed decision, page 11, penultimate paragraph; page 12, first paragraph). It follows that the skilled person would understand feature C exactly as it reads, namely as defining a single lever which is adapted to deform a plurality of flexible walls.

- 6 -

1.3.2 According to the statement of grounds of appeal, the patentee is of the opinion that "[t]he person skilled in the art would not read the plural form 'walls' and come to the conclusion that the lever is only capable of deforming more than one flexible wall" (P1, page 7, third paragraph) and that "[t]he use of the plural form 'walls' in claim 1 does not indicate that more than one wall has to be deformed by the lever" (P1, page 7, fourth paragraph).

The board is unable to follow the patentee's reasoning which contradicts the explicit wording of feature **C** reciting that "the lever [...] is adapted to activate the sensor means in the sealed cavity by deforming the flexible walls". This wording defines that a single lever deforms a plurality of flexible walls.

1.3.3 According to the patentee, the basis for feature C is to be found on page 6, lines 8 to 10, of the description as originally filed (P1, page 7, sixth and seventh paragraphs).

This passage of the original description refers to multiple levers connected to multiple flexible walls of multiple sealed cavities, wherein the levers activate sensor means in the cavities by deforming the walls. However, contrary to the patentee's submission, it does not give information about what a single lever deforms.

- 7 - T 0942/22

1.3.4 Reciting claim 7 as originally filed, the patentee concludes that "[t]he application as filed therefore includes embodiments [...] where a lever is connected to two flexible walls" (P1, page 8, fourth paragraph).

The board disagrees with the patentee's conclusion because claim 7 as originally filed recites the plural term "levers" and not the term "lever".

1.3.5 The patentee puts forward that the skilled person "would not be of the conviction based on the plural term 'walls' that there must be at least two walls that have to be deformed to achieve the effect of the claimed invention. However, he would be very aware that the presence of a cavity in the first beam does not exclude that the load cell may have a second cavity in the second beam, and in that situation he would therefore understand that two walls could be deformed to obtain a measurement" (P1, page 9, first paragraph).

The board cannot follow the patentee's statement in the first sentence because it contradicts the explicit wording of feature C. The patentee's statement in the second sentence is correct, but not relevant to the present issue of whether the application as originally filed discloses an embodiment with a lever deforming a plurality of flexible walls.

1.3.6 The patentee submits that "the inclusion of the term 'walls' in claim 1 is at best a clarity issue under Art. 84 EPC" (P1, page 9, third paragraph).

As stated in the appealed decision, page 12, first paragraph, "the skilled person would not regard the plural 'walls' in feature C as a lack of clarity". In the view of the board, the wording of feature C is clear for the

- 8 - T 0942/22

skilled person, but has no basis in the application as originally filed.

1.3.7 Finally, the patentee argues that "with regard to feature C, it is clear that the Proprietor has not gained any unwarranted advantage by referring to the final word of claim 1 in the plural form 'walls', and [therefore] the amended claim 1 should be considered as being in conformity with Art. 123(2) EPC" (P1, paragraph bridging pages 10 and 11).

It can be left open whether the amended feature **C** confers an undue advantage to the patentee, since the criterion for assessing whether the subject-matter of the patent extends beyond the content of the application as filed is whether the amendment can be derived directly and unambiguously from the application as filed.

- 1.3.8 It follows that none of the patentee's arguments that feature C did not extend the subject-matter beyond the content of the application as filed is found convincing by the board.
- 2. First and second auxiliary requests

Claim 1 of each of the first and the second auxiliary request is amended in such a way that it extends the protection conferred by claim 1 as granted (Article 123(3) EPC).

Claim 1 of each of these requests has been amended with respect to claim 1 as granted by, inter alia, changing the term "walls" in feature C to the term "wall". As stated by the opposition division, "[t]he plural term 'flexible walls' is considered to be a limiting feature of granted claim 1 which requires that a lever deforms a plurality of - 9 - T 0942/22

flexible walls and therefore exludes [sic] that a lever deforms a single flexible wall" (appealed decision, page 15, point 18.2, fifth paragraph), contrary to the requirement of Article 123(3) EPC.

- 2.2 The patentee referred to decisions T 314/03 and T 108/91of the boards of appeal and submitted that "decision [T 314/03] is applicable to the present case. In the same manner as in T0314/03, all the embodiments of the Patent in suit show that a lever deforms a single flexible wall. There is not a single embodiment showing a lever deforming a plurality of flexible walls. Therefore the 'walls' in claim 1 as granted is clearly inconsistent with the entire disclosure of the Patent in suit. As a consequence, following the conclusions of the decisions, replacing the plural term 'flexible walls' by the singular term 'flexible wall' does not violate Art. 123(3) EPC" (appealed decision, page 15, second to fourth paragraph). The patentee essentially repeated these arguments in its statement of grounds of appeal (P1, pages 12 and 13).
- 2.3 The board concurs with the opposition division that the patent discloses embodiments of a load cell comprising multiple flexible walls, e.g. in claims 6 to 9. particular, claim 7 defines a load cell comprising first levers connected to flexible walls of sealed cavities in the first beam and second levers connected to flexible walls of sealed cavities in the second beam. Therefore, "[c]laim 7 shows explicitly that the Patent in suit envisages the possibility of having a load cell configuration with a plurality of levers, wherein each lever is connected to [sic] plurality of flexible walls. Therefore, it cannot be argued that the use of the plural term 'flexible walls' in claim 1 as granted is non sensical and inconsistent with the entire disclosure of

- 10 - T 0942/22

the Patent. As a consequence, [the opposition division] considers that the conclusions of the decisions T0314/03 and T108/91 are not applicable to the present case" (appealed decision, page 15, point 18.2).

## 3. Third auxiliary request

Claim 1 is amended so that it contains subject-matter extending beyond the content of the application as filed  $(Article\ 123(2)\ EPC)$ .

- 3.1 Claim 1 of the third auxiliary request has been amended with respect to claim 1 of the main request only by changing the expression "and/or" to "and", i.e. by deleting the "or-alternative" of claim 1 of the main request. Since feature C remains unchanged with respect to claim 1 of the main request, claim 1 of the third auxiliary request contravenes Article 123(2) EPC for the same reasons as claim 1 of the main request (see point 1.2 above).
- 3.2 While the patentee contends that feature **C** "is consistent with the presence of two cavities in the load cells" (P1, page 14, fifth paragraph), the board fails to see how this amendment can overcome the objection of added subjectmatter, since two cavities are also present in claim 1 of the main request.
- 4. For the above reasons the board comes to the conclusion that none of the patentee's requests is allowable and that the appeal must be dismissed.
- 5. Decision in written procedure

In the absence of a request, and as the board does not consider holding oral proceedings to be expedient, no such

- 11 - T 0942/22

proceedings are held. As the decision is also only based on grounds on which the parties have had an opportunity to present their comments, and since the four-month period for replying to the appeal has expired, the board may hand down a decision in written procedure (Article 12(8) RPBA).

# Order

# For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



L. Gabor R. Bekkering

Decision electronically authenticated