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**Datasheet for the decision
of 23 March 2026**

Case Number: T 0443/24 - 3.2.02

Application Number: 17725023.0

Publication Number: 3454785

IPC: A61F2/24

Language of the proceedings: EN

Title of invention:

HEART VALVE WITH STENT HAVING VARYING CELL DENSITIES

Patent Proprietor:

St. Jude Medical, Cardiology Division, Inc.

Opponent:

Boston Scientific Corporation

Headword:

Relevant legal provisions:

EPC Art. 54(2)

RPBA 2020 Art. 12(3), 12(4), 12(5), 12(6), 13(2)

Keyword:

Novelty

Amendment to case - amendment within meaning of Art. 12(4) RPBA 2020

Amendment after notification of Art. 15(1) RPBA communication (yes)

Discretion not to admit submission - requirements of Art. 12(3) RPBA 2020 met (yes)

Decisions cited:

G 0001/24, T 0467/13, T 0671/08, T 1516/20, T 0511/24,
T 1659/22

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 0443/24 - 3.2.02

D E C I S I O N
of Technical Board of Appeal 3.2.02
of 23 March 2026

Appellant: St. Jude Medical, Cardiology Division, Inc.
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted/
electronically transmitted on 25 January 2024
concerning maintenance of the European Patent
No. 3454785 in amended form.**

Composition of the Board:

Chairman M. Alvazzi Delfrate
Members: A. Martinez Möller
W. Ungler

Summary of Facts and Submissions

- I. Appeals were filed by both the patent proprietor and by opponent 2 (Boston Scientific Corporation) against the interlocutory decision of the opposition division finding that the first auxiliary request filed during the oral proceedings before the opposition division met the requirements of the EPC.
- II. Opponent 1 (Neovasc Tiara Inc.) withdrew its opposition by letter dated 30 August 2024.
- III. Oral proceedings before the board took place on 23 March 2026.

The appellant/opponent 2 ("opponent") requested that the decision under appeal be set aside and that the patent be revoked.

The opponent further requested that the main request, the second to thirteenth auxiliary requests and the fifteenth to twenty-fourth auxiliary requests not be admitted into the appeal proceedings.

The appellant/patent proprietor ("proprietor") requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request filed with the statement of grounds of appeal, or of one the first to thirteenth auxiliary requests filed with the statement of grounds of appeal, or of the fourteenth auxiliary request filed as the first auxiliary request during the oral proceedings before the opposition division on 12 December 2023, or of one

of the fifteenth to twenty-fourth auxiliary requests filed with the statement of grounds of appeal.

IV. Claim 1 of the main request (patent as granted) reads as follows (with feature numbering added in bold by the board).

1.1 "A prosthetic heart valve for replacing a native valve, comprising:

1.2 a collapsible and expandable stent (300) extending between a proximal end (302) and a distal end (304), the stent (300) including

1.3 an annulus section (310) adjacent the proximal end (302), the annulus section (310) having cells (330) arranged in at least one annulus row, each said annulus row having a same first number of cells (330), the first number defining a first cell density,

1.4 an aortic section (314) adjacent the distal end (304), the aortic section (314) having cells (334) arranged in at least one aortic row, each said aortic row having a same second number of cells (334), the second number defining a second cell density,

1.5 the first cell density being greater than the second cell density, and

1.6 a transition section (312) disposed between the annulus section (310) and the aortic section (314), the transition section (312) having cells (332) arranged in at least one transition row,

1.7 the number of cells (332) per transition row defining a third cell density that is different from the first cell density and the second cell density; and

1.8 a valve assembly (104) disposed within the stent (300),

1.9 wherein each cell (334) in the at least one aortic row is directly coupled to a circumferentially adjacent cell (334) in the at least one aortic row."

V. Claim 1 of the **first auxiliary request** includes the following amendment in feature 1.9 with regard to claim 1 of the main request:

1.9 "wherein each cell (334) in the at least one aortic row is directly coupled to a circumferentially adjacent cell (334) in ~~the~~ a same at least one aortic row"

VI. The specific content of the **second to thirteenth auxiliary requests** is irrelevant to the present decision.

VII. Claim 1 of the **fourteenth auxiliary request** includes the following amendments in features 1.4 and 1.9 with regard to claim 1 of the main request:

1.4 "an aortic section (314) adjacent the distal end (304), the aortic section (314) having diamond-shaped cells (334) arranged in ~~at least~~ one aortic row, ~~each~~ said aortic row having a ~~same~~ second number of cells (334), the second number defining a second cell density"

1.9 "wherein the each cells (334) in the ~~at least~~ one aortic row are ~~is~~ directly coupled to one another at horizontal apices of a circumferentially adjacent diamond-shaped cells (334) in the ~~at least~~ one aortic row"

VIII. Compared with claim 1 of the main request, claim 1 of the **fifteenth auxiliary request** includes the following amendments in features 1.4 and 1.9:

1.4 "an aortic section (314) adjacent the distal end (304), the aortic section (314) having diamond-shaped

cells (334) arranged in at least one aortic row, each said aortic row having a same second number of cells (334), the second number defining a second cell density"

1.9 "wherein the ~~each~~ cells (334) in the at least one aortic row are connected to one another at horizontal apices of ~~is directly coupled to a~~ circumferentially adjacent diamond-shaped cells (334) in the at least one aortic row"

IX. Compared with claim 1 of the fifteenth auxiliary request, claim 1 of the **sixteenth auxiliary request** includes the following amendment in feature 1.3:

1.3 "an annulus section (310) adjacent the proximal end (302), the annulus section (310) having diamond-shaped cells (330) arranged in at least one annulus row, each said annulus row having a same first number of cells (330), the first number defining a first cell density"

X. Compared with claim 1 of the main request, claim 1 of the **seventeenth auxiliary request** includes the same amendment in feature 1.4 as the fifteenth auxiliary request, and the following amendment in feature 1.9:

1.9 "wherein each cell (334) in the at least one aortic row is directly coupled to a circumferentially adjacent cell (334) in the at least one aortic row such that the cells (334) in the at least one aortic row are connected to one another at horizontal apices of circumferentially adjacent diamond-shaped cells (334) in the at least one aortic row"

XI. Compared with claim 1 of the main request, claim 1 of the **eighteenth auxiliary request** includes the same

amendment in feature 1.3 as the sixteenth auxiliary request, the same amendment in feature 1.4 as the fifteenth auxiliary request, and the following amendment in feature 1.9:

1.9 "wherein each cell (334) in the at least one aortic row is directly coupled to a circumferentially adjacent cell (334) in the at least one aortic row such that the cells (334) in the at least one aortic row are connected to one another at the horizontal apices of circumferentially adjacent diamond-shaped cells (334) in the at least one aortic row"

XII. Compared with claim 1 of the main request, claim 1 of the **nineteenth auxiliary request** includes the same amendment in feature 1.3 as the sixteenth auxiliary request, the same amendment in feature 1.4 as the fourteenth auxiliary request, and the following amendment in feature 1.9:

1.9 "wherein the ~~each~~ cells (334) in the ~~at least~~ one aortic row are connected to one another at horizontal apices of ~~is directly coupled to a~~ circumferentially adjacent diamond-shaped cells (334) in the ~~at least~~ one aortic row"

XIII. Compared with claim 1 of the main request, claim 1 of the **twentieth auxiliary request** includes the same amendment in feature 1.9 as the nineteenth auxiliary request, and the following amendment in feature 1.4:

1.4 "an aortic section (314) adjacent the distal end (304), the aortic section (314) having one aortic row, the one aortic row having diamond-shaped cells (334) arranged to form the ~~in at least~~ one aortic row, each said aortic row having a ~~same~~ second number of cells

(334), the second number defining a second cell density"

XIV. Compared with claim 1 of the main request, claim 1 of the **twenty-first auxiliary request** includes the same amendment in feature 1.3 as the sixteenth auxiliary request and the same amendments in features 1.4 and 1.9 as the twentieth auxiliary request.

XV. Compared with claim 1 of the main request, claim 1 of the **twenty-second auxiliary request** includes the following amendments in features 1.4 and 1.9:

1.4 "an aortic section (314) adjacent the distal end (304), the aortic section (314) having a single aortic row having diamond-shaped cells (334) arranged in the ~~at least one~~ aortic row, ~~each~~ said aortic row having a ~~same~~ second number of cells (334), the second number defining a second cell density"

1.9 "wherein the ~~each~~ cells (334) in the single at least one aortic row are connected to one another at horizontal apices of ~~is directly coupled to a~~ circumferentially adjacent diamond-shaped cells (334) in the ~~at least one~~ single aortic row"

XVI. Compared with claim 1 of the main request, claim 1 of the **twenty-third auxiliary request** includes the same amendment in feature 1.3 as the sixteenth auxiliary request and the same amendments in features 1.4 and 1.9 as the twenty-second auxiliary request.

XVII. Claim 1 of the **twenty-fourth auxiliary request** reads as follows:

"A prosthetic heart valve for replacing a native valve, comprising:

a collapsible and expandable stent (300) extending between a proximal end (302) and a distal end (304), the stent (300) including an annulus section (310) adjacent the proximal end (302), the annulus section (310) having a plurality of struts forming diamond-shaped cells (330) arranged in three annulus rows, each said annulus row having a same first number of cells (330), the first number defining a first cell density, an aortic section (314) adjacent the distal end (304), the aortic section (314) having a plurality of struts forming diamond-shaped cells (334) arranged in one aortic row, said aortic row having a second number of cells (334), the second number defining a second cell density, the first cell density being greater than the second cell density, and a transition section (312) disposed between the annulus section (310) and the aortic section (314), the transition section (312) having a plurality of struts forming cells (332) arranged in two transition rows, the number of cells (332) per transition row defining a third cell density that is different from the first cell density and the second cell density; and

wherein the transition section tapers outwardly from the annulus section to the aortic section;

a valve assembly (104) disposed within the stent (300), wherein the struts of the cells (334) in the one aortic row are connected to one another at horizontal apices of both circumferentially adjacent diamond-shaped cells (334) in the one aortic row

wherein the first cell density is equal to twelve cells per row;

wherein the second cell density is equal to nine cells per row. [sic]

wherein the cells (330) in each said annulus row are smaller than the cells (334) in said aortic row."

XVIII. The following document is relevant to the present decision:

D9 WO 2015/028209 A1

XIX. The proprietor's arguments, where relevant to the present decision, can be summarised as follows.

Admittance of claim requests

The decision was based on the first auxiliary request (then "main request") and the fourteenth auxiliary request (then "new first auxiliary request").

The main request on appeal should be admitted into the proceedings. It was directed to the patent as granted. Compared with claim 1 of the first auxiliary request, claim 1 as granted reverted to a more natural phrasing without changing the technical subject-matter or the scope. The patent proprietor was not in principle hindered from reverting to the patent as granted in appeal. Admittance of the main request directed to the patent as granted posed no additional work, as the critical issues relevant to the first auxiliary request and to the patent as granted were identical (T 671/08 and T 467/13).

The second to thirteenth and fifteenth to twenty-fourth auxiliary requests were also admissible.

The second to eighth auxiliary requests were identical to auxiliary requests that had been filed and maintained before the opposition division. They did not

constitute an amendment within the meaning of Article 12(4) RPBA. The ninth to thirteenth auxiliary requests were based on requests that had been filed before the opposition division with an amendment filed in response to a conclusion present in the contested decision.

The fifteenth to twenty-third auxiliary requests corresponded to requests that had been admissibly filed and maintained before the opposition division.

The twenty-fourth auxiliary request corresponded to the eighteenth auxiliary request that had been filed and maintained before the opposition division. The twenty-fourth auxiliary request had been validly filed with the proprietor's grounds of appeal. It had been substantiated on appeal by the reference to the comments in the first-instance letter of 12 October 2023, included as Annex A of the proprietor's grounds of appeal.

First auxiliary request - novelty over D9

The subject-matter of claim 1 was novel over D9, as concluded in the contested decision. As submitted in relation to the main request, D9 did not discuss the number of cells per row. It did not disclose that each of the at least one annulus rows had the same number of cells (aspect within feature 1.3). Furthermore, D9 did not disclose that the third cell density of the transition row differed from the first cell density of the annulus section and from the second cell density of the transition section (feature 1.7). It was unclear where the number of cells provided by the opponent came from because this was not described or illustrated in D9.

Fourteenth auxiliary request - novelty over D9

The subject-matter of claim 1 was novel over D9. D9 did not disclose feature 1.7 (same reasons as in relation to the first auxiliary request), or features 1.4 or 1.9.

With regard to feature 1.4, D9 disclosed that the cells were onion-shaped (page 20, line 12), not diamond-shaped. Moreover, in D9 there were two aortic rows, and feature 1.4 of the fourteenth auxiliary request was limited to cells arranged in one aortic row, using a closed claim language that excluded further rows. Otherwise, the amendment would not have been limiting.

In D9 there were retaining arches between some of the cells of the aortic rows, so the cells were not directly coupled to one another at horizontal apices of circumferentially adjacent cells as required by feature 1.9. This submission at the oral proceedings regarding feature 1.9 was new. It should be admitted because the decision was in the proprietor's favour and there had been no reason to present it earlier. It was only after the board's preliminary opinion that there had been a need to provide additional arguments.

Fifteenth to twenty-third auxiliary requests - novelty over D9

Claim 1 of each of the twenty-second and twenty-third auxiliary requests specified that the aortic section had a "single aortic row", thus excluding aortic sections with further aortic rows. The stent disclosed in D9 had two aortic rows. Therefore claim 1 of each of

the twenty-second and twenty-third auxiliary requests was novel over D9.

Twenty-fourth auxiliary request

No objections prejudiced maintenance of the patent on the basis of the twenty-fourth auxiliary request.

XX. The opponent's arguments, where relevant to the present decision, can be summarised as follows.

Admittance of claim requests

The main request should not be admitted. It was directed to the patent as granted, which was not the subject of the contested decision.

The second to thirteenth auxiliary requests should not be admitted. During the first-instance proceedings, the proprietor had deliberately avoided a decision on the second to eighth auxiliary requests by ranking them lower than the current fourteenth auxiliary request. The ninth to thirteenth auxiliary requests were new requests. They broadened requests which, in the first-instance proceedings, were also ranked lower than the current fourteenth auxiliary request.

The fifteenth to twenty-fourth auxiliary requests should not be admitted. They had been filed with the proprietor's grounds of appeal but had not been substantiated, with explicit indications that it would be assessed later whether they needed to be maintained and that no comments were provided on these requests. The proprietor's reply to the appeal cursorily substantiated the fifteenth to twenty-third auxiliary requests. However, the twenty-fourth auxiliary request

was not even mentioned, hence it had not been filed and maintained. In any case, the twenty-fourth auxiliary request had not been substantiated.

First auxiliary request - novelty over D9

D9 disclosed all the features of claim 1. Figures 1 and 2 of D9 showed only the front half of the frame (D9, page 16, lines 20 to 26). The frame was rotationally symmetrical and comprised three commissure posts, as shown in the flat roll-out view of Figure 3. The number of cells per row between two commissure posts could be counted, and multiplying it by three resulted in the total number of cells in each row. Accordingly, the frame of D9 had two rows of 18 cells in an aortic section, two rows of 15 cells in a transition section and one row of 24 cells in an annulus section. Therefore the cell density was different in each of the three sections (feature 1.9). Since there was only one annulus row, it also anticipated feature 1.3.

Fourteenth auxiliary request - novelty over D9

The subject-matter of claim 1 was not novel over D9.

Claim 1 of the fourteenth auxiliary request had an open language. Feature 1.4 did not exclude that the aortic section had cells arranged in aortic rows other than the one "aortic row". Nor did the claim exclude the stent comprising cells which were not part of any of the three sections.

The cells disclosed in D9 corresponding to the aortic section of claim 1 were diamond-shaped cells. The use of a different term in D9 was irrelevant. The cells in

D9 had exactly the same shape as the cells described as "diamond-shaped cells" in the contested patent.

The proprietor's submission during the oral proceedings that D9 did not disclose feature 1.9 of claim 1 of the fourteenth auxiliary request was new and should not be admitted (Article 13(2) RPBA).

Fifteenth to twenty-third auxiliary requests - novelty over D9

The amendment in claim 1 of the twenty-second and twenty-third auxiliary requests requiring that the aortic section have a single aortic row did not confer novelty over D9. As submitted in relation to the fourteenth auxiliary request, claim 1 used an open claim language that allowed further structures. D9 disclosed all the structures and rows of cells required by claim 1. The fact that D9 also showed additional structures such as additional rows of cells did not change that.

Twenty-fourth auxiliary request

There were no further objections to the twenty-fourth auxiliary request.

Reasons for the Decision

1. Patent

1.1 The patent relates to prosthetic heart valves. Claim 1 is directed to a prosthetic heart valve comprising a collapsible and expandable stent and a valve assembly disposed within the stent.

- 1.2 Through its collapsible nature, the prosthetic heart valve can be delivered into a patient via a tube-like delivery apparatus such as a catheter or a laparoscopic instrument. Inaccurate deployment, expansion and anchorage at the desired implant site may result in paravalvular leakage. Calcification may also prevent the stent from properly expanding (see paragraph [0008] of the contested patent).
- 1.3 The patent addresses these issues by providing a stent including three sections (annulus section, aortic section and transition section). Each section has cells arranged in at least one row. For each section, each row has a same number of cells that defines a cell density. The cell density is different for each of the rows, and is greater for the annulus section than for the aortic section.
- 1.4 According to the patent, the cell density affects the expansion of the stent (see paragraphs [0019] and [0020] of the contested patent). In the claimed prosthetic heart valve, the relatively higher cell density in the annulus section of the stent provides a greater radial force and reduces the effect of an under-expanded cell on the performance of a valve, while the relatively lower cell density of the aortic section minimises interference with blood flow to the coronary arteries and provides better access by guidewires or other tools during or after implantation.
- 1.5 An example of a self-expanding stent 300 with different cell density for each section is shown in Figure 3B of the patent, reproduced hereinafter. The stent 300 comprises an annulus section 310, a transition section 312 and an aortic section 314.

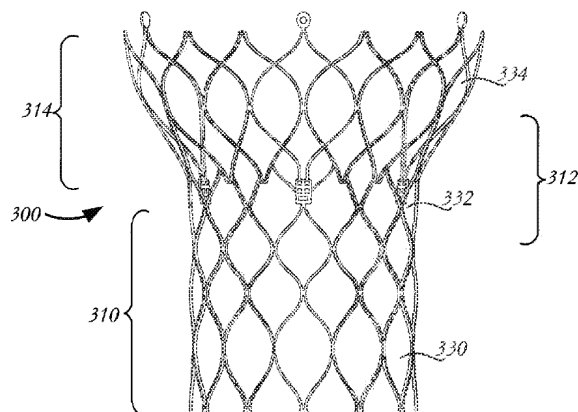


FIG. 3B

2. Main request - admittance

2.1 The proprietor's main request is directed to the maintenance of the patent as granted. In the opposition proceedings, the proprietor did not maintain this request. Instead, it replaced it with maintenance in amended form in accordance with the main request filed on 12 October 2023. Consequently, no decision was taken on the patent as granted.

2.2 The proprietor submitted that a patent proprietor is not in principle hindered from reverting to the patent as granted in appeal and that in the present case it did not introduce additional issues, citing decisions T 467/13 and T 671/08. These two decisions were taken before the entry into force on 1 January 2020 of a revised version of the RPBA, explicitly indicating in Article 12(6) that requests which were no longer maintained shall not be admitted unless the circumstances of the appeal case justified their admittance.

2.3 In view of the proprietor's submission that claim 1 of the patent as granted has the same scope as claim 1 of

the then-main request in the opposition proceedings (now first auxiliary request) but uses a more natural phrasing, the amendment does not seem suitable to address the issues which led to the decision under appeal. Moreover, there are no "circumstances of the appeal case" within the meaning of Article 12(6), second sentence, RPBA that justify the admittance of the main request directed to the patent as granted.

2.4 Therefore the board decided not to admit the main request into the appeal proceedings.

3. First auxiliary request - novelty over D9

3.1 The contested decision does not explicitly deal with novelty over D9 for the present first auxiliary request (then main request), since this request was found to comprise added matter. However, in the reasons relating to the present fourteenth auxiliary request (then first auxiliary request), the contested decision concluded in point 9.2.3 that D9 did not disclose feature 1.7 (feature 1.7 has identical wording in both requests).

3.2 It is undisputed that D9 discloses, in the parts indicated within parentheses, the features of claim 1 of the first auxiliary request reproduced below. The aspects in dispute are placed within square brackets.

1.1 A prosthetic heart valve for replacing a native valve (Figures 1 and 2, see also page 17, lines 8 and 9), comprising:

1.2 a collapsible and expandable stent extending between a proximal end and a distal end (radially collapsible frame in Figure 1 and page 16, lines 20 and 21), the stent including

1.3 an annulus section adjacent the proximal end

(collar 50 at lower part of stent, see also paragraph bridging pages 20 and 21), the annulus section having cells arranged in at least one annulus row (one row at inflow end), [each] said annulus row having a [same] first number of cells (one row), the first number defining a first cell density (the number of cells in the row, i.e. 24 cells),

1.4 an aortic section adjacent the distal end (cell structure 30 formed by first and second cell regions 31 and 32, see paragraph bridging pages 19 and 20), the aortic section having cells arranged in at least one aortic row (two rows of cells), each said aortic row having a same second number of cells (number of cells in first and second row are equal), the second number defining a second cell density (the number of cells in each of the two rows, i.e. 18 cells),

1.5 the first cell density being greater than the second cell density (24 annulus cells vs. 18 aortic cells per row), and

1.6 a transition section disposed between the annulus section and the aortic section (section with irregularly shaped cells between collar 50 and aortic section 30), the transition section having cells arranged in at least one transition row (rows with full/half cells),

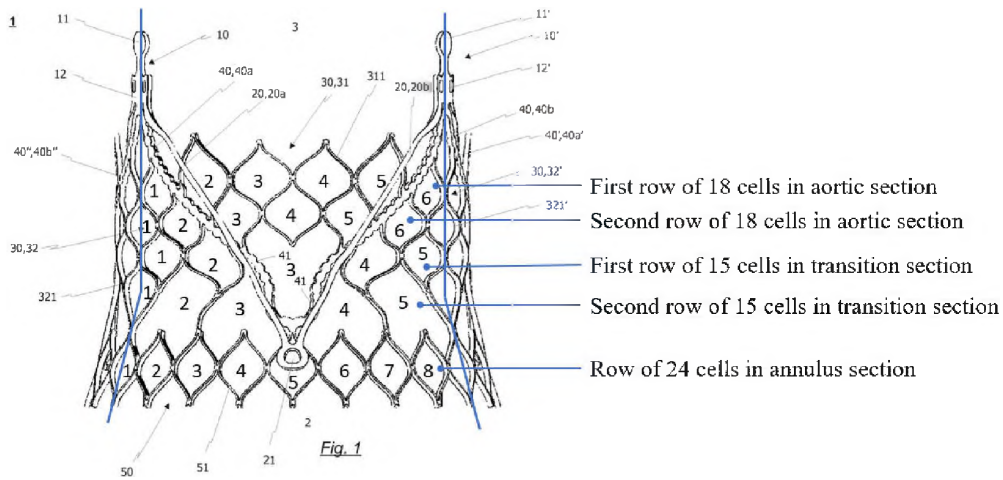
[**1.7** the number of cells per transition row defining a third cell density that is different from the first cell density and the second cell density;] and

1.8 a valve assembly disposed within the stent (valvular prosthesis, not shown in Figures 1 and 2, see page 17, lines 8 and 9),

1.9 wherein each cell in the at least one aortic row is directly coupled to a circumferentially adjacent cell in a same at least one aortic row (cells in cell structure 30 are coupled to adjacent cells, see Figure 1).

- 3.3 The proprietor submitted that D9 did not discuss the number of cells per row. It did not disclose that each of the at least one annulus rows had the same number of cells (aspect within feature 1.3), nor did it disclose the relative cell density between the three sections (feature 1.7).
- 3.4 That is, the reasoning in the contested decision and the proprietor's arguments are both based on the understanding that D9 did not directly and unambiguously disclose the number of cells in each row. The reasons below show why this is incorrect.
- 3.5 D9 discloses in the embodiment of Figures 1 to 3 a collapsible frame for a prosthetic heart valve. It comprises three commissure attachment regions 10, 10' and 10''. Figures 1 and 2 are perspective side views which respectively only show the front half of a frame (see page 16, lines 20 to 26). Hence, contrary to what is stated in point 9.2.3 of the decision, cells "from behind" are not shown in Figure 1 and cannot have an impact on the cell count. Figure 3 is a flat roll-out view of the same frame in a collapsed state (see page 21, lines 28 to 29 and 33 to 34). As submitted by the opponent, it is clear from Figures 1 to 3 that the frame is rotationally symmetrical.
- 3.6 In view of the above, it is possible to count the cells in a row between two commissure attachment regions and multiply this number by three to obtain the total number of cells in the row. This method allows the cells in each row of the frame disclosed in the embodiment of Figures 1 to 3 of D9 to be counted. This can be done using Figure 1, for example. An annotated version of Figure 1 which was included on page 19 of

the opponent's statement of grounds of appeal is reproduced below.



3.7 The board agrees with the opponent that D9 directly and unambiguously discloses in the embodiment of Figures 1 to 3 a stent with an aortic section with 18 cells/row (the two top rows of cells have 18 cells/row), a transition section with 15 cells/row (the two intermediate rows) and an annulus section with 24 cells/row (the bottom row has 24 cells).

3.8 Consequently, D9 anticipates the two aspects disputed by the proprietor: "each said annulus row having a same first number of cells" (aspect of feature 1.3), since the frame of D9 comprises a single annulus row; and "the number of cells per transition row defining a third cell density that is different from the first cell density and the second cell density" (feature 1.7), since the number of cells per row differs in each of the three sections, as detailed above.

3.9 Since it is undisputed that all the other features of claim 1 of the first auxiliary request are anticipated by the embodiment of Figures 1 to 3 of D9 (see point

3.2 above), the subject-matter of claim 1 of the first auxiliary request is not novel over D9.

4. Second to thirteenth auxiliary requests - admittance

4.1.1 At the oral proceedings before the opposition division, the proprietor requested to have the current fourteenth auxiliary request (then labelled "New First Auxiliary Request 12 Dec 2023", and based on the eleventh auxiliary request filed on 12 October 2023) considered before any other auxiliary request. The opposition division found this request to be allowable, and no other auxiliary request was then considered.

4.1.2 On appeal, the proprietor requested that the second to thirteenth auxiliary requests be considered prior to the request found allowable by the opposition division. The second to eighth auxiliary requests correspond to auxiliary requests filed on 12 October 2023. The ninth to thirteenth auxiliary requests are based on auxiliary requests filed on 12 October 2023 with the deletion of the diamond-shaped limitation.

4.1.3 The proprietor's request that claim requests which were either entirely absent in this form or ranked in the first-instance proceedings lower than the present fourteenth auxiliary request be considered first goes against the primary object of the appeal proceedings, which is to review the decision under appeal in a judicial manner (Article 12(2) RPBA). Moreover, the new requests and the re-ordering of previous requests constitute amendments pursuant to Article 12(4) RPBA (see, for example, T 1516/20, Reasons 2.5 to 2.9 and T 511/24, Reasons 2).

- 4.1.4 The proprietor argued that the requests did not introduce new issues and "have substantially all been seen before". However, this does not explain why it did not file these requests in that order during the opposition proceedings but only in the appeal proceedings. Moreover, admittance and consideration of these requests could lead to new discussions of added subject-matter and patentability and potentially justify remitting the case to the opposition division for consideration of new issues. Admittance of these amendments would thus be contrary to procedural economy.
- 4.2 Therefore the board decided to use its discretion under Article 12(4) RPBA not to admit the second to thirteenth auxiliary requests into the appeal proceedings.
5. Fourteenth auxiliary request - novelty over D9
- 5.1 The fourteenth auxiliary request corresponds to the request which was considered allowable in the contested decision.
- 5.2 The opponent submitted that claim 1 of the fourteenth auxiliary request was not novel over D9. The proprietor submitted that D9 did not disclose features 1.4, 1.7 and 1.9.
- 5.3 The wording of feature 1.7 of the fourteenth auxiliary request is identical to its wording in the first auxiliary request. For the reasons set out above in relation to the first auxiliary request, D9 discloses feature 1.7.

5.4 Regarding feature 1.9, the proprietor's submission that it was not disclosed in D9 was only made at the oral proceedings before the board. This submission constitutes an amendment to the proprietor's appeal case within the meaning of Article 13(2) RPBA. The proprietor argued that it had not made this submission earlier because the contested decision had been in its favour regarding novelty over D9, with feature 1.7 as a distinguishing feature. It added that the need to submit further reasons why claim 1 was novel only arose with the board's preliminary opinion. The board is not convinced by these submissions. The opponent's grounds of appeal challenged the contested decision's finding on novelty of claim 1 of the fourteenth auxiliary request over D9. It is in the nature of the appeal proceedings that the board may be convinced by a party's submissions that a finding in the contested decision is incorrect. If the proprietor had considered there to be further distinguishing features, it should have identified these at the earliest stage possible, rather than waiting for the board's preliminary opinion and making new submissions in that regard only at the oral proceedings. Therefore there are no exceptional circumstances within the meaning of Article 13(2) RPBA to justify the admittance of the amendment to the proprietor's appeal case at such a late stage. Accordingly, the board decided not to admit the proprietor's submission regarding feature 1.9.

5.5 With regard to feature 1.4, the proprietor argued that the frame of D9 had two aortic rows and not one as required by feature 1.4, and that the cells of the aortic section of D9 were "onion-shaped" and not "diamond-shaped".

- 5.6 The valve defined in claim 1 of the fourteenth auxiliary request comprises a stent "including an annulus section ..., an aortic section ..., and a transition section ...;". The term "including" indicates that the stent may comprise additional sections with further cells. No other feature of claim 1 excludes the presence of cells outside the three recited sections either. Therefore even if, for the sake of argument, feature 1.4 were interpreted as requiring that all cells of the aortic section be arranged in a single aortic row (an interpretation not shared by the board), claim 1 would still allow for a row of cells outside any of the three sections defined in the claim.
- 5.7 The frame of D9 thus anticipates a stent including an aortic section having cells "arranged in one aortic row" (the top row of cells of the stent shown in Figures 1 and 2), with the second top row of cells in Figures 1 and 2 not belonging to the aortic section or to any of the other sections specified in claim 1.
- 5.8 Still with regard to feature 1.4, whether D9 anticipates that the aortic section has "diamond-shaped cells" depends on how this term is interpreted. As set out in the Order of G 1/24, the description and drawings shall always be consulted to interpret the claims when assessing the patentability of an invention. The contested patent neither defines a diamond shape nor explicitly states what is meant by "diamond-shaped cells". However, it refers to cells that are essentially identical in shape to those in the top row of cells in Figure 1 of D9 as "diamond-shaped cells" (see, for example, the cells in Figure 1 of the contested patent and the corresponding description in column 3, lines 41 to 43; compare with the shape of the

cells in the top row in Figure 1 of D9). Accordingly, the term "diamond-shaped cells" in feature 1.4 of the contested patent is construed as encompassing cells such as the cells of the top row of cells in Figure 1 of D9. This conclusion is not altered by the fact that D9 uses the term "onion-shaped cell structure" (page 20, line 12) rather than "diamond-shaped cells" to describe the shape, as anticipation does not require the same literal term to be explicitly disclosed.

- 5.9 In view of the above, the embodiment of Figures 1 to 3 of D9 anticipates feature 1.4 as follows: "an aortic section (*the top row of cells in Figures 1 to 3 of D9*) adjacent the distal end, the aortic section having diamond-shaped cells (*the top row of cells being diamond-shaped within the meaning of claim 1 as set out in point 5.8 above*) arranged in one aortic row (*the top row of cells*), said aortic row having a second number of cells (*the top row having 18 cells, as set out in point 3.7 above*), the second number defining a second cell density".
- 5.10 In summary, it is undisputed that the embodiment of Figures 1 to 3 of D9 anticipates features 1.1 to 1.3, 1.5, 1.6, 1.8 and 1.9 of claim 1 (the proprietor's submission at the oral proceedings that D9 does not disclose feature 1.9 not being admitted). D9 likewise anticipates features 1.4 and 1.7 for the reasons set out above. Consequently, the subject-matter of claim 1 is not novel over D9.
6. Fifteenth to twenty-third auxiliary requests - novelty over D9

- 6.1 Irrespective of the question of their admittance, the fifteenth to twenty-third auxiliary requests are not allowable for the reasons set out below.
- 6.2 In the written proceedings, the proprietor did not explain why the amendments to claim 1 of each of the fifteenth to twenty-third auxiliary requests should confer novelty over D9 when compared with claim 1 of the first or fourteenth auxiliary requests discussed above.
- 6.3 In section 4.2 of the preliminary opinion provided in the board's communication pursuant to Article 15(1) RPBA, the board indicated that D9 appeared to disclose all the features of claim 1 of each of the fifteenth to twenty-third auxiliary requests. The board's communication noted that the cells of the annulus section of the frame of D9 were diamond-shaped and that claim 1 did not exclude the stent comprising rows of cells which did not belong to any of the three sections. During the oral proceedings before the board, the proprietor disputed this preliminary opinion only in relation to the twenty-second and twenty-third auxiliary requests. It argued that the aortic section of D9 had two aortic rows, rather than the "single aortic row" required by feature 1.4 of these requests. This would confer novelty over D9 on claim 1 of these requests.
- 6.4 Claim 1 of both the twenty-second and twenty-third auxiliary requests is directed to a valve with a stent "including" three sections. As set out in point 5.6 above, claim 1 does not exclude the presence of cells outside the three specified sections. The frame of D9 thus anticipates a stent including an aortic section "having a single aortic row having diamond-shaped cells

arranged in the aortic row": the top row of diamond-shaped cells of the frame shown in Figures 1 and 2 of D9 is considered to anticipate the single aortic section, while the second top row of cells does not belong to the aortic section or to any of the other sections specified in claim 1. Therefore feature 1.4 of the twenty-second and twenty-third auxiliary requests does not confer novelty over D9.

- 6.5 For the reasons set out above, the other features of these requests, as well as all the features of the fifteenth to twenty-first auxiliary requests, are likewise disclosed in D9. It follows that the subject-matter of claim 1 of each of the fifteenth to twenty-third auxiliary requests is not novel over D9.
7. Twenty-fourth auxiliary request - admittance
- 7.1 The proprietor filed the twenty-fourth auxiliary request - in its capacity as respondent - together with its grounds of appeal.
- 7.2 The grounds of appeal stated that it would be assessed at a later date whether the set of requests comprising the twenty-fourth auxiliary request needed to be maintained. There was no indication at a later stage that this request had not been maintained. On the contrary, the proprietor provided arguments in support of the admissibility of the request in its letter dated 3 December 2024 and repeated at the oral proceedings before the board that it maintained the request.
- 7.3 The same request had been filed in the first-instance proceedings, at the final date fixed by the opposition division under Rule 116 EPC, as eighteenth auxiliary

request. Therefore it represents a so-called carry-over request.

- 7.4 The proprietor convincingly demonstrated that the request had been substantiated at the time of filing and that it had not been withdrawn or otherwise abandoned as fallback position in the event that the then-higher-ranked requests were deemed unallowable (see point 2 of the minutes of the oral proceedings before the opposition division). Moreover, there is no indication that the opposition division would have exercised its discretion in order not to admit this request. Therefore the twenty-fourth auxiliary request has been admissibly raised and maintained in the proceedings leading to the contested decision. Consequently, it does not constitute an amendment within the meaning of Article 12(4) RPBA.
- 7.5 The opponent submitted that the twenty-fourth auxiliary request had not been substantiated on appeal. The opponent relied in particular on a passage on page 3 of the proprietor's grounds of appeal reading "we do not believe it is necessary to comment on these requests", which referred to the set of requests comprising the twenty-fourth auxiliary request. The board understands the opponent's submission as an indication that the twenty-fourth auxiliary request was not substantiated within the meaning of Article 12(3) RPBA and that under Article 12(5) RPBA it should not be admitted.
- 7.6 It is undisputed that the twenty-fourth auxiliary request had been substantiated when it was filed in the first-instance proceedings in a letter dated 12 October 2023 (see substantiation of the then-eighteenth auxiliary request on pages 15 and 16). Page 3 of the proprietor's grounds of appeal,

immediately after the passage quoted above and relied on by the opponent, states the following: "For the avoidance of doubt, we maintain any comments made in our R 116 submission, attached as Annex A" [i.e. the letter dated 12 October 2023]. That is, the proprietor's grounds of appeal explicitly refer to the comments on the auxiliary requests made in that letter.

7.7 In this case, the specific reference to the attached first-instance letter with regard to substantiation of the twenty-fourth auxiliary request is sufficient, since the opponent did not raise any substantial objection against the twenty-fourth auxiliary request in its written appeal submissions (see also T 1659/22, point 2.2.3 of the Reasons).

7.8 In summary, the twenty-fourth auxiliary request was admissibly raised and maintained in the proceedings leading to the contested decision, i.e. does not constitute an amendment within the meaning of Article 12(4) RPBA. Furthermore, it is substantiated within the meaning of Article 12(3) RPBA. It follows that the board has no discretion to disregard the twenty-fourth auxiliary request, which is thus part of the appeal proceedings.

8. Twenty-fourth auxiliary request - allowability

8.1 Claim 1 of the twenty-fourth auxiliary request specifies further details of the stent which are not anticipated by the frame of D9, for example that the cells of the annulus section are arranged in three annulus rows, each annulus row having twelve cells per row.

8.2 During the written appeal proceedings, the opponent did not raise any objections to the twenty-fourth auxiliary request. During the oral proceedings, it indicated that it had no further objections to this request. The opponent did not refer either to any specific objection raised during the written appeal proceedings that might directly apply to the twenty-fourth auxiliary request, and the board is not aware of any such objection.

8.3 Therefore the contested patent can be maintained on the basis of the twenty-fourth auxiliary request.

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 with the following claims and a description to be adapted thereto:

Claims 1 to 5 of auxiliary request 24 filed with the statement of grounds of appeal of the patent proprietor.

The Registrar:

The Chairman:



A. Chavinier-Tomsic

M. Alvazzi Delfrate

Decision electronically authenticated