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Datasheet for the decision of 15 July 2025

Case Number: T 1515/23 - 3.2.02

Application Number: 17160915.9

Publication Number: 3202371

IPC: A61F2/24

Language of the proceedings: EN

Title of invention:
HEART VALVE ANCHORING DEVICE

Patent Proprietor:
Tricares

Opponent:
T-Heart SAS

Relevant legal provisions:
EPC Art. 110, 100(c), 123(2), 54(2), 56, 113(1), 116(1)
RPBA 2020 Art. 12(1)(a), 12(3), 13(2)
EPC R. 99(2)

Keyword:
Admissibility of appeal - (yes)
Grounds for opposition - added subject-matter (yes)
Amendments - auxiliary request - extension beyond the content of the application as filed (no)
Claims - claim interpretation
Novelty - (yes)
Inventive step - (yes)

Decisions cited:
G 0001/15, G 0001/24, T 2387/13

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Case Number: T 1515/23 - 3.2.02

D E C I S I O N
of Technical Board of Appeal 3.2.02
of 15 July 2025

Appellant: (Patent Proprietor)	Tricares 27 avenue de l'Opéra 75001 Paris (FR)
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Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 4 July 2023 concerning the maintenance of European Patent No. 3202371 in amended form**

Composition of the Board:

Chair	D. Ceccarelli
Members:	A. Martinez Möller
	C. Schmidt

Summary of Facts and Submissions

I. Appeals were filed by both the patent proprietor and the opponent against the interlocutory decision of the opposition division finding that the request before it designated auxiliary request 1 met the requirements of the EPC.

II. Oral proceedings before the board took place on 15 July 2025.

The appellant-patent proprietor (the "proprietor") requested that the decision under appeal be set aside and that the patent be maintained as granted (main request) or, as an auxiliary measure, that the opponent's appeal be dismissed.

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

The opponent further requested that the proprietor's appeal be rejected as inadmissible and that neither its main request nor its auxiliary request be admitted into the appeal proceedings due to a lack of substantiation.

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

"**1.1** An anchoring system (11) for anchoring a prosthetic heart valve inside a heart, comprising

1.2 a self-expanding anchoring device (1) for anchoring a prosthetic heart valve support supporting a prosthetic heart valve inside a heart (1),
1.3 a prosthetic heart valve support (12) and
1.4 a prosthetic heart valve (13) connected to the prosthetic heart valve support (12),
1.5 said anchoring device comprising an extraventricular part (2) designed to be positioned inside an atrium or an artery,
1.6 a ventricular part (3) designed to be positioned inside a ventricle,
1.7 characterized in that said ventricular part (3) comprises an outer wall (4) and an inner wall (5) spaced apart at the level where the prosthetic heart valve is intended to be inserted in order to mechanically isolating [sic] the inner wall from the outer wall,
1.8 and further **characterized in that** the anchoring device (1) comprises a predefined V- or U-shaped groove (8) formed between the extraventricular part (2) and the ventricular part (3)
1.9 designed to accommodate, pinch and press the annulus of the native heart valve."

IV. Claim 1 of the auxiliary request found allowable by the opposition division includes the following amendment (shown using strikethrough) in feature 1.8 as compared with claim 1 of the main request.

"and further **characterized in that** the anchoring device (1) comprises a predefined V-~~or U~~-shaped groove (8) formed between the extraventricular part (2) and the ventricular part (3)"

V. The following documents are cited in the present decision.

D0a EP 3 202 371 A1
D0p WO 2015/107226 A1
P1 EP 2 896 387 A1
D2 EP 2 742 911 A1
D3 US 8 070 800 B2
D4 WO 2013/037519 A1
D5 WO 2012/004679 A2
D8 WO 2012/178115 A2
D10 US 2014/0222142 A1
D11 WO 2013/175468 A2

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

Admissibility of the proprietor's appeal and requests

The proprietor's appeal was not admissible because it was not substantiated as required by Rule 99(2) EPC in view of Article 12(3) RPBA. The proprietor's requests were not substantiated either and should therefore not be admitted.

With regard to the Article 123(2) EPC objection on the basis of which the opposition division concluded that the main request was not allowable, the proprietor's grounds of appeal simply repeated the arguments made at first instance, which were considered unconvincing in the contested decision. Furthermore, the proprietor's grounds of appeal did not include any substantiation with respect to the other objections that precluded the subject-matter from patentability.

Main request - added subject-matter

Claim 1 as granted comprised added subject-matter. The application as filed only disclosed pinching or pressing of the annulus as specified in feature 1.9 for a specific V-shaped groove. Paragraph [0052] of the application as filed disclosed an embodiment enabling pinching and pressing, but it did not disclose pinching and pressing for any arbitrary configuration of the groove. A U-shaped groove was only mentioned in paragraphs [0068] and [0071], but without any reference to the pinching and pressing of feature 1.9.

Auxiliary request - added subject-matter

Claim 1 of the auxiliary request infringed Articles 76(1) and 123(2) EPC in relation to features 1.7 and 1.9.

With regard to feature 1.7, paragraph [0037] of the application as filed referred to a generic double-walled device rather than a double-walled ventricular part. This paragraph disclosed three options, but none of them corresponded to claim 1 of the auxiliary request. Moreover, the double wall as specified in paragraph [0143] of the application as filed was "composed of" an outer wall and an inner wall. This was an exhaustive definition that excluded the possibility of the double wall comprising further elements. In contrast, the ventricular part in claim 1 of the auxiliary request comprised an outer wall and an inner wall, but could comprise additional elements.

Feature 1.9 represented an unallowable intermediate generalisation. Paragraph [0052] of the application as filed did not disclose that the groove was V-shaped.

This paragraph also used the word "contain", which was absent from claim 1. Paragraph [0066] included features that were not present in claim 1. In particular, it referred to a V-shaped groove in combination with a toroidal part of the outer wall of the ventricular part.

Auxiliary request - novelty over P1

Claim 1 of the auxiliary request was not entitled to partial priority from P1 because of the large number of embodiments to be considered and the lack of support and enabling disclosure in the contested patent for these embodiments. Hence, the priority claim was not valid.

Consequently, P1 was prior art under Article 54(3) EPC. Claim 1 was not novel over P1 because the narrower subject-matter of P1 fell within the more generic scope of the claim.

Auxiliary request - novelty over D4

The subject-matter of claim 1 of the auxiliary request was not novel over D4, either.

Feature 1.8 did not require a "V-shaped groove" to be comparatively pointy; nor did it exclude a rounded shape. The contested patent even disclosed in paragraph [0070] that a V-shaped groove could have a rounded bottom. In view of the reference in paragraph [0068] to a V-shaped groove formed at the junction of a toroidal shape, straight walls were not required for a V-shaped groove either. The skilled person would have considered any shape having an inclined portion intersecting with a declining portion

to correspond to a V-shape. Hence, groove 45 of Figures 10a to 10c of D4 anticipated a V-shaped groove as required by feature 1.8.

The claimed priority was not valid for claim 1. Even if the priority were considered to be partly valid, the part of claim 1 for which the priority was not valid had to be interpreted broadly, especially since the contested patent did not provide any details on how this part should be carried out or on embodiments possibly covered by the claims. Hence, feature 1.8 of claim 1 of the auxiliary request had to be construed such that the inner wall could form the V-shaped groove.

Auxiliary request - novelty over D11

The subject-matter of claim 1 of the auxiliary request was not novel over D11, either.

Figures 10 and 11 of the contested patent were not present in the priority document and were added to enlarge the concept of "groove", which did not require any contact between the two sides of the groove, i.e. it did not require a closed groove bottom.

Figures 13E, 22A and 22C of D11 showed a V-shaped groove formed by the outer arms 134, 34 and the flange-like distal portion 135, 35.

Auxiliary request - novelty over D10

As the priority claim was not valid, D10 was prior art under Article 54(2) EPC. The subject-matter of claim 1 of the auxiliary request was not novel over D10, either.

As submitted with respect to D4, the term "V-shaped groove" in feature 1.8 did not exclude a rounded shape of the bottom thereof; nor did it define a particular curvature. In Figures 51E and 51EE of D10, the support arms 5006A, 5006B and 5071A, 5071B formed a V-shape together with the inflow portion 5002. A V-shape was alternatively formed in Figure 51E by the ventricular support arms 5006A, 50006B together with the atrial part of the frame 5010. A V-shape was also formed in Figure 50 of D10 by the support arms 5071A, 5071B with the inflow portion 5002 of the frame 5010. Hence, D10 disclosed feature 1.8.

Auxiliary request - novelty over D2

The subject-matter of claim 1 of the auxiliary request was not novel over D2, either.

With regard to feature 1.8, a V-shaped groove was formed by the anchors 28 when bent downwards in conjunction with the atrial portion 14 (Figure 1 of D2).

Auxiliary request - inventive step starting from D5

The subject-matter of claim 1 of the auxiliary request was not inventive when starting from D5.

D5 disclosed in the embodiment of Figure 13A an inner device with an indentation defining a V-shaped groove. Feature 1.9 did not exclude that structures other than the V-shaped groove facilitate securing of the anchoring device to the annulus of the native heart valve. It was mentioned on page 14 of D5 that the groove itself may establish the engagement with tissue

of the native heart valve. Therefore, D5 disclosed feature 1.9.

Auxiliary request - inventive step starting from D3

The combination of D3 with either common general knowledge or D8 rendered obvious the subject-matter of claim 1 of the auxiliary request.

D3 disclosed in an embodiment shown in Figures 2D, 18A and 18D a heart valve prosthesis including a docking station, with features 1.7 and 1.8. With regard to feature 1.9, D3 disclosed that the prosthesis could be anchored in the heart with an outer wall in contact with adjacent tissue, and that the docking station was compatible with the anatomical site and was concave and relatively short in its major axis to accommodate the geometry of the mitral annulus. Feature 1.9 did not define the degree of pinching, i.e. the extent of the pressing applied from opposite sides.

Some compression was necessary in D3 to secure the docking station. Compression was a mandatory effect of an anchoring device and would have been provided by the person skilled in the art using their common general knowledge.

The problem to be solved by the pinching of the annulus was to improve the anchoring of the docking station of D3. To solve this problem, D8 taught a retainer with appropriate dimensions to conform to the native annulus, engage it from opposing ends, and use compressive and/or radial forces. D8 thus taught that reducing the axial space resulted in compressive forces that improved the anchoring. Taking this teaching into account, the person skilled in the art would have

modified the docking station of D3 by reducing its axial size so as to have compressive forces from opposite sides, thereby pinching the native annulus as required by feature 1.9.

Auxiliary request - inventive step starting from D11

The subject-matter of claim 1 of the auxiliary request was not inventive when starting from D11, either. With regard to feature 1.8, D11 taught using prosthetic valves with arms having extension members extending radially, and also that the extension distance and angle could be chosen such that the axial height could be adapted to approach the periphery of the radial annulus (see, for example, page 6, lines 20 to 29, page 32, lines 2 to 6 and lines 19 to 20, and page 33, lines 28 to 29, as well as claims 27 to 29). The person skilled in the art starting from D11 and using common general knowledge would have modified the arms of D11 so as to ensure proper pinching of the annulus, and would therefore have arrived at a pointy bottom of the already V-shaped groove.

Admissibility of the proprietor's arguments made at the oral proceedings regarding the auxiliary request

According to Article 12(3) RPBA, the proprietor should have presented its entire appeal case in its grounds of appeal and in its reply to the opponent's appeal. However, these submissions contained no substantiation for the auxiliary request and no arguments against the objections raised by the opponent to the auxiliary request.

At the oral proceedings, the proprietor should have been prevented from making any oral submissions

regarding the opponent's objections to the auxiliary request, as any arguments made would be regarded as having been filed late without justification. This was usually standard practice before the boards of appeal. In any case, these late-filed arguments should not be admitted under Article 13(2) RPBA.

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

Admissibility of the proprietor's appeal and requests

The proprietor's appeal was admissible and the main request was substantiated.

The proprietor's grounds of appeal addressed the only reason why the contested decision concluded that the main request was not allowable, namely that claim 1 contained added subject-matter in relation to the U-shaped groove. The grounds of appeal referred to the contested decision and addressed the reasoning therein.

Main request - added subject-matter

Claim 1 as granted did not comprise added subject-matter. The application as filed disclosed in paragraphs [0051] and [0052] the general concept of a system with a groove between the extraventricular and ventricular parts. Paragraph [0052], which described the pinching and pressing, referred to "the groove 8", thus referring to any groove denoted with reference sign 8. A V-shaped groove and a U-shaped groove were disclosed as forming part of this general concept. The opposition division had misinterpreted paragraph [0052].

Auxiliary request - added subject-matter

Claim 1 of auxiliary request 1 complied with Articles 76(1) and 123(2) EPC. With regard to feature 1.7, the feature "an outer wall and an inner wall" specified a double wall. With regard to feature 1.9, the V-shaped groove could be included without the further limitations of paragraph [0066] of the application as filed.

Auxiliary request - novelty over D4

Claim 1 of the auxiliary request was novel over D4 because D4 did not disclose any of features 1.3, 1.8 and 1.9. The groove 45 in D4 was rounded and not V-shaped.

Auxiliary request - novelty over D11

Claim 1 of the auxiliary request was also novel over D11. Figure 22 of D11 did not show a V-shaped groove at the location defined in feature 1.8.

Auxiliary request - novelty over D10

Even if D10 were considered to be prior art, it did not disclose a groove, let alone a V-shaped groove, within the meaning of the opposed patent.

Auxiliary request - novelty over D2

Claim 1 of the auxiliary request was also novel over D2. The anchors 28 did not form a V-shaped groove.

Auxiliary request - inventive step starting from D3

D3 did not disclose any of features 1.7, 1.8 and 1.9. Several steps would have had to be taken to achieve the claimed solution starting from D3. Hence, the subject-matter of claim 1 was inventive when starting from D3.

Admissibility of the proprietor's arguments made at the oral proceedings regarding the auxiliary request

The arguments presented at the oral proceedings were within the framework of the contested decision and should be taken into account.

Reasons for the Decision

1. Patent

1.1 Some of the problems of known anchoring devices for prosthetic heart valves include:
(1) support of the prosthetic heart valve while in contact with the annulus, thereby transmitting many of the distorting forces exerted by the surrounding anatomy to the prosthetic heart valve and potentially eventually causing it to malfunction;
(2) migration or slippage relative to the heart wall if the anchoring relies only on radial anchoring; and
(3) inaccurate positioning of the anchoring device due to the lack of direct sight and resulting difficulty of manoeuvring during surgery.

1.2 The invention addresses the need for devices enabling proper anchoring of a prosthetic heart valve within the native heart valve while avoiding or preventing trauma to the surrounding tissue.

1.3 The claimed anchoring system comprises a self-expanding anchoring device, a prosthetic heart valve support and a prosthetic heart valve. The anchoring device comprises an extraventricular part, a ventricular part and a groove formed between the extraventricular part and the ventricular part.

2. Admissibility of the proprietor's appeal and requests

2.1 The opposition division found that the ground for opposition set out in Article 100(c) EPC prejudiced the maintenance of the patent as granted, which is the proprietor's main request. According to the contested decision, the application as filed did not disclose a combination of a U-shaped groove together with a pinching function. This was the only reason the main request was found not to be allowable, and therefore the only reason the proprietor needed to address in view of Article 12(3) RPBA.

2.2 The proprietor's statement of grounds of appeal addresses this reason and sets out why the proprietor considers the decision to be wrong in this respect. For example, the statement of grounds of appeal argues that paragraph [0052] of the application as filed was misinterpreted by the opposition division and that the contested decision is based on the "self-positioning" feature, which does not form part of the claim. Contrary to the opponent's allegation, these arguments are not mere repetitions of those presented at first instance. Instead, they specifically address the reasoning provided in the contested decision. While there may be some overlap between the arguments presented in the first-instance proceedings and those presented on appeal, this is normal, particularly when

discussing why the application as filed provides a basis for a disputed combination of features.

2.3 Therefore, the proprietor's appeal complies with Rule 99(2) EPC. It is undisputed that it also complies with the other requirements for admissibility as set out in Rule 101(1) EPC. Consequently, the proprietor's appeal is admissible.

2.4 For the same reasons as those set out above, the proprietor's main request (patent as granted) is substantiated within the meaning of Article 12(3) RPBA and is part of the appeal proceedings.

2.5 The proprietor's auxiliary request was for the dismissal of the opponent's appeal. According to Article 110 EPC, the board must assess whether an appeal is admissible and if it is, the board must then examine whether it is allowable, and decide on it. There is no legal basis for ruling out the examination of the opponent's appeal, in particular in view of the reasons given in the impugned decision. A possible outcome of this examination is that the appeal is dismissed. Consequently, the proprietor's request that the opponent's appeal be dismissed is also part of the appeal proceedings.

3. Main request - added subject-matter

3.1 The opposition division concluded that D0a (the application as filed) did not disclose a U-shaped groove in combination with feature 1.9. The proprietor contested this conclusion.

3.2 The first sentence of paragraph [0051] of D0a discloses that "[a]ccording to the invention", the device

comprises a groove 8 designed for accommodating the native heart valve. The first sentence of paragraph [0052] goes on to say that "[i]n one embodiment", the groove 8 is designed to accommodate, pinch, contain and press the native heart valve. Contrary to the proprietor's submission, the latter sentence is not equivalent to stating that all grooves 8 have this feature. It simply discloses that there is an embodiment in which the groove 8 has this feature.

3.3 An embodiment of a V-shaped groove that pinches the native heart valve is disclosed in paragraph [0066] of D0a, providing a basis for the combination of feature 1.9 and a V-shaped groove.

3.4 As noted in the decision under appeal, a U-shaped groove is only mentioned in paragraphs [0068] and [0071] of D0a. In neither case is feature 1.9 mentioned in combination with a U-shaped groove.

3.5 Consequently, D0a does not directly and unambiguously disclose the combination of a U-shaped groove together with feature 1.9. This combination is not disclosed in D0p, either.

3.6 It follows that the ground for opposition set out in Article 100(c) EPC prejudices the maintenance of the patent as granted.

4. Auxiliary request - added subject-matter

4.1 Feature 1.7

4.1.1 The opponent contended that feature 1.7 of claim 1 of the auxiliary request (i.e. the request found allowable

in the decision under appeal) is an unallowable intermediate generalisation.

4.1.2 Feature 1.7 of claim 1 of the auxiliary request differs from the corresponding disclosure in the first embodiment of paragraph [0143] of D0a in that the following amendments have been made:

"said ventricular part (3) comprises ~~a double wall composed of~~ an outer wall (4) and an inner wall (5) spaced apart at the level where the prosthetic heart valve is intended to be inserted in order to mechanically isolating [sic] the inner wall from the outer wall"

4.1.3 As submitted by the opponent, the disclosure in paragraph [0143] that the double wall is "composed of" an outer wall and an inner wall means that the double wall does not comprise any further structural elements. However, contrary to the opponent's submissions, the ventricular part in the first embodiment of paragraph [0143] is only required to comprise a double wall composed of an outer wall and an inner wall spaced apart at the level where the prosthetic heart valve is intended to be inserted. The first embodiment of paragraph [0143] of D0a, like claim 1 of the auxiliary request, leaves open whether or not the double wall extends at other locations of the ventricular part (e.g. whether it extends along the whole ventricular part) and whether or not the ventricular part comprises parts or walls in addition to the double wall.

4.1.4 Paragraph [0037] of D0a defines a double wall as two walls spaced apart in order to mechanically isolate the first wall from the second wall. It states that a device with a double wall refers to a double-walled

device along (i) at least the portion intended to receive the prosthetic heart valve; (ii) along the whole ventricular part; or (iii) along the entire length of the anchoring device.

4.1.5 The amendment in claim 1 of auxiliary request 1 replaces the term "double wall" in paragraph [0143] with the definition thereof as set out in paragraph [0037]. The amendment retains the limitation from paragraph [0143] that the two walls are "spaced apart at the level where the prosthetic heart valve is intended to be inserted", corresponding to alternative (i) of paragraph [0037]. The amendment does not result in any new information. The opponent's submission that paragraph [0143] referred to a double-walled device and not to a double-walled ventricular part is not convincing, as the anchoring device of claim 1 of the auxiliary request is double-walled by virtue of having an outer wall and an inner wall along the portion intended to receive the prosthetic heart valve.

4.1.6 The board therefore agrees with the decision under appeal that the expression "double wall" in paragraph [0143] of D0a does not define a limitation that is not present in claim 1 of the auxiliary request. Hence, there is no generalisation, let alone an unallowable intermediate generalisation, in relation to feature 1.7.

4.2 Feature 1.9

4.2.1 At the oral proceedings, it was disputed whether there is added subject-matter in relation to feature 1.9. This feature specifies that the V-shaped groove is

"designed to accommodate, pinch and press the annulus of the native heart valve".

4.2.2 Paragraph [0052] of D0a discloses that, "[i]n an embodiment, the groove 8 is designed to accommodate, pinch, contain and press the native heart valve, especially the annulus of the native heart valve".

4.2.3 Paragraph [0066] then refers to an embodiment in which "the junction between the approximately toroidal part of the outer wall 4 of the ventricular part and the at least one extraventricular flange 6 of the outer wall 4 or inner wall 5 defines a V-shaped groove 8. Said V-shaped groove 8 allows pinching or cinching of the native heart valve, especially of the annulus of the native heart valve throughout the cardiac cycle".

4.2.4 Feature 1.9 is based on the two paragraphs referred to above, whereby the embodiment of paragraph [0066] has been generalised. The opponent submitted that it was an unallowable intermediate generalisation because the embodiment comprised further features, in particular the toroidal shape of the outer wall of the ventricular part. The opponent did not provide any arguments as to why the toroidal shape would be inextricably linked to the V-shaped groove being designed to pinch the annulus. The board does not see any reason why it would be inextricably linked either, as a V-shaped groove designed to pinch can be achieved with many other shapes of the outer wall (e.g. with the conical shape presented as an alternative in the immediately preceding paragraph of D0a, i.e. paragraph [0065]).

4.2.5 Therefore, there is no added subject-matter in relation to feature 1.9.

4.3 It follows that the auxiliary request complies with Article 123(2) EPC.

4.4 The description and the drawings of D0a correspond, respectively, to the description and claims, and to the drawings of the parent application D0p. The reasoning above in relation to Article 123(2) EPC, which refers only to the description and the drawings of D0a, therefore also applies to Article 76(1) EPC and the disclosure of D0p. Consequently, the auxiliary request complies with Article 76(1) EPC.

5. Auxiliary request - novelty over P1

5.1 P1 is the publication of the priority document of the patent in suit.

5.2 In the light of decision G 1/15 concerning the entitlement of a claim to partial priority, according to Article 54(3) EPC P1 would only belong to the state of the art for the part of the subject-matter of claim 1 of the auxiliary request that is not entitled to claim priority from that document. In other words, novelty over P1 could only be an issue for the part which was not entitled to claim priority from this document. This implies, in turn, that P1 does not disclose this part in a direct and unambiguous way. Hence, regardless of the claimed subject-matter, the specific disclosure of P1, the extent of validity of the claimed priority and the complexity of determining this extent, P1 cannot preclude the novelty of claim 1 (see also T 2387/13, point 2.1.1).

6. Auxiliary request - novelty over D4

6.1 The opponent submits that the circumferential groove 45 in Figures 10a to 10c of D4 anticipates a V-shaped groove within the meaning of claim 1. The groove 45 is rounded with a continuous curvature, approximating a semicircular shape.

6.2 Contrary to the opponent's allegations, paragraph [0070] of the contested patent does not disclose that a V-shaped groove can have a rounded bottom. Instead, paragraph [0070] describes a device with a V-shaped groove as enabling more precise positioning than "other devices without groove [sic] or with U-shaped, C-shaped or rounded-bottom grooves", thus presenting a rounded-bottom groove as not being a V-shaped groove.

6.3 The term "V-shaped groove" in feature 1.8 imposes requirements on the shape of the groove and excludes grooves such as the continuously curved and almost semicircular groove shown in Figures 10a to 10c. It follows that D4 at least does not disclose feature 1.8, and therefore the subject-matter of claim 1 of the auxiliary request is novel over D4.

6.4 With regard to this and other objections relating to a lack of novelty and inventive step, the opponent argued that claim 1 had to be interpreted taking into account the fact that the priority claim of claim 1 is either not valid or only partly valid, and that in the part of the claims for which the priority claim is not valid, the contested patent covered embodiments for which it did not provide any detailed explanation on how they could be carried out.

6.5 The board first notes that there is no need to establish whether or not the priority claim is valid in order to reach a decision in these appeal proceedings.

6.6 The content of the priority document(s) and the question of whether or not the priority claim is (partly) valid are relevant in establishing the effective filing date (see Article 89 EPC). By contrast, when assessing the patentability of an invention under Articles 52 to 57 EPC, claim interpretation relates to how a person skilled in the art consulting the description and drawings of the patent specification would interpret the claims (see the Order of G 1/24). If priority has been claimed, the content of the priority document(s) is not relevant for the purpose of interpreting the claims.

6.7 As to the opponent's arguments relating to an alleged lack of teaching in the patent on how some parts of the claimed subject-matter possibly not entitled to the priority could be carried out, these may relate, at most, to sufficiency of disclosure. However, the opponent has not raised any objections relating to a lack of sufficiency under Article 83 or Article 100(b) EPC.

6.8 As the opponent correctly noted, the claimed subject-matter is only entitled to priority if the subject matter is disclosed in the priority document(s) in an enabling manner (see the Order of G 1/15 and section II.D.4.6 in Case Law of the Boards of Appeal, 11th edition, July 2025). This relates to the determination of whether or not the priority claim is (partly) valid. However, it is irrelevant in the context of claim interpretation.

6.9 In summary, the opponent's arguments on claim interpretation in view of the alleged partial lack or total lack of entitlement to priority are of no relevance for the assessment of novelty and inventive step.

7. Auxiliary request - novelty over D11

7.1 The opponent stated that the flange-like portion of the atrial part 35, 135 and the outwardly extending part of the arms 34, 134 in Figures 13E, 22A and 22C of D11 define a V-shaped groove. In the region between the extraventricular/atrial part and the ventricular part, where the native heart valve is intended to be received, these elements are separate from each other, and it is unclear from the figures whether the elements run parallel to each other or whether they progressively approach each other in this region. Moreover, as noted in point 3.2.9.4 of the Reasons of the decision under appeal, the part that could be considered to define a V-shaped groove extends to the bottom, to the point where the arms 34, 134 start. It is thus formed between two elements that are considered by the opponent to anticipate the inner and outer walls of the ventricular part, and not between the extraventricular part and the ventricular part as required by feature 1.8. Consequently, D11 at least does not disclose feature 1.8.

8. Auxiliary request - novelty over D10

8.1 The opponent argued that feature 1.8 was anticipated by D10 with three alternative attacks. None of them is convincing for the following reasons. In Figures 51E and 51EE of D10, the support arms 5006A, 5006B and 5071A, 5071B form, together with the inflow

portion 5002, a rounded shape, which does not anticipate a V-shaped groove (see also points 6.2 and 6.3 above). In Figure 51E of D10, the curve highlighted by the opponent between support arms 5006A, 5006B and the lower part of frame 5010 is at the ventricular part and not "between the extraventricular part and the ventricular part", as required by feature 1.8. The portion marked with dotted lines in modified Figure 50 of D10, which is included in section 90 of the opponent's grounds of appeal, is not a V-shaped groove but an arbitrary virtual extension of a segment of the support arms 5071A, 5071B and a segment of the inflow portion 5002.

8.2 It follows that at least feature 1.8 is not disclosed in D10. Therefore, irrespective of whether the priority is validly claimed for the whole subject-matter of claim 1 of the auxiliary request, the objection of a lack of novelty over D10 is not convincing.

9. Auxiliary request - novelty over D2

9.1 D2 is a European patent application filed before the priority date of the patent in suit and published after the priority date of the patent in suit. D2 thus constitutes prior art at least under Article 54(3) EPC.

9.2 With regard to feature 1.8, the opponent submitted that a V-shaped groove was formed by the anchors 28 when bent downwards (see paragraph [0029] of D2) in conjunction with the atrial portion 14. The anchors 28 have rounded ends and are, for example, loop-shaped (see paragraphs [0010] and [0028], as well as Figure 1). When bent downwards, the rounded ends of the anchors 28 and the atrial portion 14 do not form a V-shaped groove as required by feature 1.8 (see, for

example, the bottom anchor 28 on the left-hand side in Figure 1 of D2, or the schematic figures on page 37 of the opponent's grounds of appeal). Even if a groove were to be considered present, it would not be V-shaped due to the rounded ends of the anchors 28. It follows that D2 at least does not disclose feature 1.8.

10. Auxiliary request - inventive step starting from D5

10.1 According to the decision under appeal, D5 does not disclose features 1.3, 1.7 and 1.9. The opponent disputed this conclusion.

10.2 As regards feature 1.9, the board sees no disclosure in D5 of a groove specifically designed to accommodate, pinch and press the annulus of the native heart valve. If at all, it would be the combination of the inner and the outer devices, which according to D5 can perform all these actions together. However, feature 1.9, when read in view of feature 1.8, requires that it is the V-shaped groove (without further elements) that is designed to do this. The opponent referred to page 14 of D5, which discloses that the force may be provided by the inner device that presses against the outer device. Yet the pinching specified in feature 1.9 is only achieved through the interaction of the inner and outer devices, and not by the V-shaped groove itself, which is provided in the inner device. Therefore, D5 does not disclose feature 1.9.

10.3 The opponent has not provided arguments as to why feature 1.9 is not inventive. In view of the geometry of the prosthesis in D5, there is no reason to regard this feature as obvious, if at all possible in the prosthesis of D5. Therefore, the subject-matter of

claim 1 involves an inventive step when starting from D5.

11. Auxiliary request - inventive step starting from D3

11.1 D3 relates to an anchoring system with a self-expanding anchoring docking station for a prosthetic heart valve. Figures 2D, 18A and 18B of D3 show a docking station with a shape similar to an hourglass (see column 1, line 64, to column 2, line 1). The docking station is intended for receiving, at its intermediate portion, a replacement heart valve (reference sign 91 in Figures 18A, 18B).

11.2 According to the decision under appeal, D3 does not disclose features 1.7, 1.8 and 1.9. The opponent disputed this conclusion and submitted that the subject-matter of claim 1 of the auxiliary request was rendered obvious by the combination of D3 (Figures 2D, 18A and 18B) with common general knowledge or D8.

11.3 With regard to feature 1.9, D3 discloses that the external contour of the docking station conforms to the mitral annulus to accommodate it (column 7, lines 35 to 42, and column 8, lines 4 to 10). Accommodating the annulus means that there is enough space for the annulus to fit in, without implying any kind of compression, let alone a compression from opposite sides that anticipates the pinching required by feature 1.9.

11.4 By accommodating the annulus around its concave outer wall, in contact with it, the docking station of D3 would be prevented from slipping and migrating. This would allow it to be anchored in the heart, as mentioned in D3 (column 2, lines 57 to 60). Contrary to

the opponent's submissions, this does not require any compression from opposite sides. There is thus no reason why the person skilled in the art, using only common general knowledge and without any motivation to do so, would have modified the docking station of D3 to pinch the annulus.

11.5 The opponent argued that the pinching by the groove solves the problem of improving the anchoring of the docking station, and argued that the person skilled in the art starting from D3 and with this problem in mind would have consulted D8. The board agrees.

11.6 D8 deals with artificial heart valves and is in the same technical field as D3. D8 discloses a device 100 with a (valve) support 110 and a self-expanding retainer 140 coupled thereto. The retainer 140 can conform to the native annulus (see paragraph [0045]) and can apply radial forces against the surrounding tissue and/or compressive forces against the upstream and downstream surfaces of the annulus to maintain the position of the device at the annulus (see, for example, paragraphs [0053], [0054] and [0057]). D8 discloses different shapes for the retainer 140 (see, for example, Figures 7, 8A to 8D and 13A to 13F, as well as paragraphs [0090] and [0091]).

11.7 As submitted by the opponent, the retainer 140 of D8 corresponds to the docking station of D3 and serves to retain the valve support. However, contrary to the opponent's submissions, D8 does not provide a general teaching of providing compressive forces, let alone of reducing the axial size of the retainer so as to have compressive forces. For example, in many embodiments of D8 (see, for example, Figures 7, 8A to 8D and 13A), the axial size of the retainer extends well beyond the

region that is intended to receive and pinch the annulus.

11.8 The compressive forces are disclosed in D8 for specific embodiments of the retainer 140. As set out in points 3.3.1.4 and 3.3.1.5 of the contested decision, other than the U-shaped example of Figure 13A of D8, the retainer 140 is formed of a single wall. As also set out in the contested decision, D8 does not contain any teaching as to how to modify a docking station such as the one disclosed in D3, especially since the structure of the docking station with inner and outer walls is substantially different from the structure of the retainer 140.

11.9 The person skilled in the art starting from the anchoring system of D3 and wanting to improve its anchoring to the native tissue would not have implemented feature 1.9 in an obvious way. For example, the skilled person could have replaced the docking station of D3 with one of the retainers of D8 instead, and therefore would not have arrived at an anchoring system having features 1.7 to 1.9 in combination.

11.10 It follows that the objections of a lack of inventive step starting from D3 are not convincing.

12. Auxiliary request - inventive step starting from D11

12.1 The opponent submitted that claim 1 of the auxiliary request was not inventive over D11 in view of common general knowledge.

12.2 As noted above in relation to the objection of a lack of novelty over D11, D11 at least does not disclose a V-shaped groove as required by feature 1.8. The

opponent referred to passages of D11 which mention that each arm may radially expand to a different diameter or axial height and that they can approach the radial periphery of the annulus. The passages describe where the arms end, but do not address the reasons set out above in relation to the objection of a lack of novelty explaining why the arms and the flange-like portion do not form a V-shaped groove between the extraventricular part and the ventricular part as required by feature 1.8. The opponent has not provided arguments as to why this feature would be obvious when starting from D11.

12.3 Therefore, the objection of a lack of inventive step starting from D11 is not convincing.

13. In summary, none of the objections submitted by the opponent prejudice the maintenance of the patent on the basis of the auxiliary request.

14. Admissibility of the proprietor's arguments made at the oral proceedings regarding the auxiliary request

14.1 The board's conclusions on the auxiliary request are based on the parties' written submissions and arguments presented during the oral proceedings before the board.

14.2 During the discussion of the patentability of the auxiliary request at the oral proceedings, the opponent objected twice to the oral arguments presented by the proprietor.

14.3 The first time, during the discussion of novelty, the opponent requested that the proprietor be prohibited from presenting any oral arguments.

14.4 However, granting the opponent's request not to allow the proprietor to orally present any arguments on the patentability of the auxiliary request, irrespective of their content, would have deprived the proprietor of its right to be heard - which includes the right to present comments - in oral proceedings (Articles 113(1) and 116(1) EPC; see also Case Law of the Boards of Appeal, 11th edition, 2025, III.B.2.6). Therefore, the board allowed the proprietor to present oral arguments.

14.5 The proprietor's oral arguments were limited to explaining why it considered certain aspects of the claim interpretation or specific findings in the contested decision relating to each novelty objection to be correct, e.g. that a certain feature was not disclosed in a particular part of a piece of prior art. In other words, the proprietor's oral arguments did not extend beyond the reasons given by the opposition division in the contested decision.

14.6 Following the proprietor's oral submissions on novelty, the board asked the opponent to specify which of the arguments presented by the proprietor should not be admitted and why. The opponent referred to all of the arguments in general. It argued that according to Article 12(3) RPBA, the proprietor's complete appeal case should have been presented in the proprietor's grounds of appeal and reply, but that neither of these contained substantiated arguments against the opponent's objections to the auxiliary request. Hence, any arguments presented by the proprietor at the oral proceedings would be new and filed late without justification and should therefore not be admitted. The proprietor countered that its submissions simply supported the reasons for the contested decision and should be admitted.

14.7 The appeal proceedings must be based, *inter alia*, on the decision under appeal (Article 12(1)(a) RPBA). Consequently, any argument by the proprietor that remains within the reasons given in the contested decision is not to be regarded as an amendment within the meaning of Article 12(4) RPBA. Rather, such an argument relates to the specific findings in the contested decision, which must be discussed at the oral proceedings in order to examine the allowability of the opponent's appeal.

14.8 As submitted by the proprietor, its oral arguments relate to objections by the opponent which are part of the appeal proceedings and to aspects of claim interpretation addressed in the decision under appeal that have been disputed by the opponent. The proprietor's arguments do not introduce any new legal or factual elements, nor any new combination thereof. They do not relate to any new issues to be discussed; nor do they change the facts underlying the appeal proceedings. Instead, they simply elaborate on why the specific findings in the contested decision (e.g. that a claimed feature is not disclosed in a specific passage) are correct. Therefore, the board took these arguments into account.

14.9 After the proprietor presented its oral arguments on inventive step, the opponent once again requested that the proprietor's oral arguments not be admitted, and specifically referred to one argument, namely that D8 would not have been consulted when starting from D3 as it did not relate to mechanical isolation from radial forces. As the board noted during the oral proceedings, this same reason for not combining D3 and D8 is set out in the contested decision (third paragraph of

point 3.3.1.4 of the Reasons). For the same reasons set out above in relation to novelty, the board took the proprietor's oral arguments on inventive step into account insofar as they remained within the reasons given in the contested decision. Incidentally, the argument specifically challenged by the opponent, relating to the combination of D3 and D8, was ultimately not relevant to the present decision.

Order

For these reasons it is decided that:

The appeals are dismissed.

The Registrar: The Chair:

A. Chavinier-Tomsic D. Ceccarelli

Decision electronically authenticated