PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT8367241

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
PI-CARDIA LTD	12/19/2023

RECEIVING PARTY DATA

Name:	KREOS CAPITAL VI (EXPERT FUND) L.P.
Street Address:	47 ESPLANADE
City:	ST HELIER
State/Country:	JERSEY

PROPERTY NUMBERS Total: 54

Property Type	Number
Application Number:	13055507
Application Number:	13514090
Application Number:	14362405
Application Number:	14390836
Application Number:	14759228
Application Number:	14897652
Application Number:	15418919
Application Number:	15723379
Application Number:	15766830
Application Number:	16087649
Application Number:	16341924
Application Number:	16852694
Application Number:	16894999
Application Number:	17464890
Application Number:	61083934
Application Number:	61096061
Application Number:	61162343
Application Number:	61267029
Application Number:	61356617
Application Number:	61566766
Application Number:	61621005

Property Type	Number
Application Number:	61639929
Application Number:	61749440
Application Number:	61835596
Application Number:	62238250
Application Number:	62315810
Application Number:	62412960
Application Number:	62849919
Application Number:	62870068
Application Number:	63048664
Application Number:	63220588
Application Number:	63231826
Application Number:	18346389
Application Number:	18004895
Application Number:	17608816
Application Number:	17857326
Application Number:	63396971
Application Number:	63439904
Application Number:	63489196
Application Number:	63516519
PCT Number:	US2009051784
PCT Number:	US2010058810
PCT Number:	US2012067812
PCT Number:	US2013035346
PCT Number:	US2014010265
PCT Number:	US2014040991
PCT Number:	IB2016055993
PCT Number:	IB2017051798
PCT Number:	IB2017056657
PCT Number:	IB2018057667
PCT Number:	IB2021056025
PCT Number:	IB2020054729
PCT Number:	IB2022057418
PCT Number:	IB2023058029

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Correspondent Name:	JMB DAVIS BEN-DAVID
Address Line 1:	11 KIRYAT MADA
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ATTORNEY DOCKET NUMBER:	96088/60.996
NAME OF SUBMITTER:	AARON LEWIN
SIGNATURE:	/Aaron Lewin/
DATE SIGNED:	01/08/2024

Total Attachments: 21

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FIRST AMENDMENT (this **"First Amendment"**)

Dated December 19, 2023

to:

that certain US INTELLECTUAL PROPERTY SECURITY AGREEMENT by and among Kreos Capital VI (Expert Fund) LP and Pi-Cardia Ltd. (each a "**Party**" and together the "**Parties**"), dated October 21, 2021 (the "**IP Security Agreement**").

WHEREAS, the Parties have entered into that certain Loan Agreement as of October 21, 2021, as amended on or about the date hereof, for the provision of a Loan Facility.

WHEREAS, the Parties hereto wish to add new and updated patents and patents applications to Schedule A of the IP Security Agreement;

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth herein, the Parties hereby agree as follows:

1. **Definitions**

Unless otherwise defined herein, capitalized terms used in this First Amendment shall have the meaning ascribed to them under the IP Security Agreement.

2. **Amendment of Schedule of the IP Security Agreement.**

Schedule A to the IP Security Agreement shall be replaced in its entirety by the amended Schedule A in the form attached hereto as **Schedule A**.

3. **Survival of Provisions**

Except as otherwise expressly amended hereby as set forth above, the provisions of the IP Security Agreement and all other documents executed in connection therewith shall remain in full force and effect, insofar as they do not contradict this First Amendment.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned have executed this First Amendment to the US Intellectual Property Security Agreement as of the date set forth above.

PI-CARDIA LTD.

By: _____
Title: Eyal Kolka
Date: Executive Director

KREOS CAPITAL VI (EXPERT FUND) LP

By: _____
Title: Mark Collins Director
Date:

IN WITNESS WHEREOF, the undersigned have executed this First Amendment to the US Intellectual Property Security Agreement as of the date set forth above.

PI-CARDIA LTD.

By: _____
Title: Eyal Kolka
Date: Executive Director

KREOS CAPITAL VI (EXPERT FUND) LP

By: DocuSigned by: Mark Collins 2297FC28DA2245D...
Title: Mark Collins Director
Date:

SCHEDULE A

Dekel Patent Ltd.

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18 Menuha VeNahala Street, Room 27
Rehovot 76209
Israel

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דקל פטנט בע"מ

בית הרופאים
מנוחה ונחלה 18, חדר 27
רחובות 76209

21 November 2023

PI-CARDIA LTD.
5 David Fikes Street
Rehovot 7632805

Re: Patent Status

Dear Sirs,

The following pages provide the current status of the patent applications filed on behalf of Pi-Cardia Ltd.

Patent Family Applications: 18 (11 Leaflex; 2 Short Cut, 5 Future Tech IP)
Patents Granted: 37 (11 US, 9 Europe, 7 China, 6 Japan, 4 India) – all are Leaflex patents but one of them also covers ShortCut (US 11690637)

Best regards,

David Klein
US Patent Agent 41118
Dekel Patent Ltd.

FRACTURING CALCIFICATIONS IN HEART VALVES				
Our Ref 1926GOL				
Assigned to Pi-R-Squared Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	61/083934	27 July 2008		
US	61/096061	11 Sep 2008		
US	61/162343	23 Mar 2009		
PCT	PCT/US2009/051784	27 July 2009		
US	13/055507	24 Jan 2011	9717513 1 Aug 2017	
Japan	2011-520248	27 July 2009	5588978 granted 10 Sept 2014	
Europe	09802244.5	27 July 2009	2326264 15 Nov 2017	Validated in Germany, France, UK, Spain, Italy, Ireland, Netherlands, Switzerland

Main US Claim:

A device for fracturing calcifications in heart valves comprising:
an impactor catheter configured for percutaneous delivery to a heart valve;
an impact-producing element disposed at a distal portion of said catheter and operative to vibrate and create a mechanical impact when deployed out of an external housing of said catheter and brought into contact with a calcification at a leaflet of said heart valve;
an energy source operative to vibrate said vibrating impact-producing element so that said impact-producing element fractures the calcification without necessarily removing the calcification from the leaflet; and
an anvil against which the calcification is struck by said impact-producing element,
wherein said energy source is located at a proximal portion of said catheter.

FRACTURING CALCIFICATIONS IN HEART VALVES				
Our Ref 2038GOL				
Assigned to Pi-R-Squared Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	61/267029	5 Dec 2009		
US	61/356617	20 Jun 2010		
PCT	PCT/US2010/058810	3 Dec 2010		
US	13/514090	5 June 2012	9554816 31 January 2017	
US	15/418919	30 Jan 2017		Abandoned for continuation 17/464890
US	17/464890	2 Sep 2021	11690637 4 July 2023	
US	18/346389	3 July 2023		Pending
Europe	10803420.8	3 Dec 2010	2506781 21 March 2018	Validated in Germany, France, UK, Italy, Ireland, Netherlands, Switzerland
China	201080062697.5	3 Dec 2010	102791207 Granted 9 Sept 2015	
India	5858/DELNP/2012	3 Dec 2010	350924 Granted 5 Nov 2020	

Main US 9554816 Claim:
A device for fracturing calcifications in heart valves comprising:
an expandable stabilizer and expandable impactor arms assembled on and deployed by a delivery system, wherein said delivery system is operable to move said impactor arms, while in an expanded position, with respect to said stabilizer with sufficient energy so as to fracture a calcification located in tissue which is sandwiched between said stabilizer and said impactor arms, wherein said delivery system comprises a catheter, in which are disposed said expandable stabilizer, an internal shaft and an impactor shaft on which are mounted said impactor arms, and wherein said internal shaft is movable to cause said impactor arms to expand outwards and be locked in an expanded shape, distal portions of said impactor arms being distanced from said impactor shaft, and wherein an impacting element is movable to cause said impactor arms, while in the expanded shape, to move linearly with respect to said stabilizer with sufficient energy so as to fracture a calcification located in tissue which is sandwiched between said stabilizer and said impactor arms.

Main US 11690637 claim and the claim also covers ShortCut:
A heart valve treatment device comprising:
a first heart valve treatment member movable along a first shaft portion and comprising at least one expandable, non-inflatable member;
a second heart valve treatment member movable along a second shaft portion and comprising at least one expandable, non-inflatable member; and
wherein said first and second heart valve treatment members are movable between first and second structural positions along said first and second shaft portions, respectively;
wherein in the first structural position, said first heart valve treatment member is positioned on a proximal side of a heart valve leaflet and said second heart valve treatment member is positioned on a distal side of the heart valve leaflet, and wherein there is a first gap between said first and second heart valve treatment members, said first gap being sized such that none of said first and second heart valve treatment members fractures a portion of the heart valve leaflet, and
in the second structural position, said at least one expandable, non-inflatable member of said first heart valve treatment member is in a first expanded shape in which it extends outwards from said first shaft portion at an acute angle with respect to said first shaft portion, and said at least one expandable, non-inflatable member of said second heart valve treatment member is in a second expanded shape in which a portion of said second heart valve treatment member extends outwards from said second shaft portion at an obtuse angle relative to said acute angle, and here is a second gap between said first and second heart valve treatment members, said second gap being smaller than said first gap and said second gap being sized such that both of said first and second heart valve treatment members contact the heart valve leaflet and said first heart valve treatment members comprises a fracture edge located on an outer surface thereof directed at said acute angle towards the heart valve leaflet which is configured to fracture a portion of the heart valve leaflet by axial movement of said first heart valve treatment member, with said fracture edge remaining at said acute angle, towards said second heart valve treatment member which remains expanded at said obtuse angle.

FRACTURING CALCIFICATIONS IN HEART VALVES				
Our Ref 2133GOL				
Assigned to Pi-R-Squared Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	61/566766	5 Dec 2011		
PCT	PCT/US12/67812	5 Dec 2012		
US	14/362405	3 Jun 2014	10143452 4 Dec 2018	
Europe	12823063.8	5 Dec 2012	2787902 1 Oct 2018	Validated in Germany, France, UK, Italy, Ireland, Netherlands, Switzerland
China	201280059535.5	5 Dec 2012	104023656 17 January 2017	
India	4325/DELNP/2014	5 Dec 2012	363726 31 Mar 2021	
Japan	2014-544996	5 Dec 2012	6210236 11 Oct 2017	

Main US Claim:
A device for fracturing calcifications in heart valves comprising:
a stabilizer assembly and an impactor assembly assembled on and deployed by a delivery system, wherein said delivery system is operable to cause relative motion between said impactor assembly and said stabilizer assembly with sufficient energy so as to fracture a calcification located in tissue which is sandwiched between said stabilizer assembly and said impactor assembly said impactor assembly comprising a biasing device;
wherein said impactor assembly and said stabilizer assembly have shaped impact delivery portions configured to have a shape in accordance with the tissue which is sandwiched between said stabilizer assembly and said impactor assembly, and wherein said stabilizer assembly comprises an external layer and said impactor assembly comprises an internal layer, said external and internal layers being movable with respect to each other, such that moving one of said external and internal layers with respect to the other changes the shape of said stabilizer assembly, and wherein said internal layer comprises an internal tube and an impactor tube, and said external layer comprises a stabilizer tube and an external tube, and wherein said internal layer and said external layer are initially pre-tensioned towards each other.

PERCUTANEOUS GUIDANCE AND PROTECTION SLEEVE				
Our Ref 2160GOL				
EMBOLI PROTECTION SLEEVE OVER CATHETER				
Our Ref 2171GOL				
Assigned to Pi-R-Squared Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	61/621005	6 Apr 2012		
US	61/639929	30 Apr 2012		
PCT	PCT/US13/35346	5 Apr 2013		Combines 2160 + 2171
US	14/390836	6 Oct 2014	9895216 20 Feb 2018	
Europe	13724921.5	5 Apr 2013	2833825 30 Nov 2018	Validated in Germany, France, UK, Italy, Ireland, Netherlands
China	2013800297810	5 Apr 2013	CN104334118 January 2017	

Main US claim:
A device comprising:
a protection sleeve; and
a retractable sheath operatively connected to said protection sleeve; and
a catheter that passes through a main lumen of said sleeve, wherein said catheter comprises a heart valve treatment device arranged to pass into a lumen of said catheter; and
wherein said heart valve treatment device comprises a stabilizer element, and wherein said protection sleeve comprises one or more distal anchoring members operative to align said stabilizer element axially so that a central axis of said catheter, which passes through said stabilizer element, coincides with a central axis of a lumen of a patient.

STABILIZER ASSEMBLY FOR FRACTURING CALCIFICATIONS IN HEART VALVES				
Our Ref 2256GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	61/749440	7 Jan 2013		
PCT	PCT/US14/010265	5 Jan 2014		
US	14/759228	5 July 2015	10143481 4 Dec 2018	
Europe	14706350.7	5 Jan 2014	2941210 16 Nov 2016	Validated in Netherlands, Ireland, France, Germany, Italy, UK
China	201480004122.6	5 Jan 2014	105050513 20 June 2017	
India	5948/DELNP/2015	5 Jan 2014	About to be allowed	
Japan	2015-551796	5 Jan 2014	6270872 12 Jan 2018	

Main US claim:
A device for fracturing calcifications in heart valves comprising:
a stabilizer assembly for use with an impactor assembly, wherein relative motion between said impactor assembly and said stabilizer assembly with sufficient energy fractures a calcification located in tissue which is sandwiched between said stabilizer assembly and said impactor assembly,
wherein said stabilizer assembly comprises a shaft from which extend a plurality of arms and wherein a pair of distal stabilizer struts extend, in different directions from each other from distal portions said arms;
and further comprising stabilizer loops, each of said loops comprising a pair of legs connected to each other at a proximal end of the loop to form a curved, closed proximal end and distal ends of the legs being spaced from each other, wherein one of said distal ends of said legs is coupled to a first one of said distal stabilizer struts and the other one of said distal ends of said legs is coupled to a second one of said distal stabilizer struts adjacent to said first one of said distal stabilizer struts, said curved, closed proximal end being proximal to said distal ends of said legs.

PERCUTANEOUS EMBOLI PROTECTION SLEEVE				
Our Ref 2309GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	61/835596	16 Jun 2013		
PCT	PCT/US14/40991	5 Jun 2014		
US	14/897652	12 Dec 2015		Abandoned
China	201480034294.8	5 Jun 2014	105451684 19 Apr 2017	
Europe	14737082.9	5 Jun 2014	3010442 7 Dec 2016	Validated in France, UK, Ireland, Netherlands, Germany, Italy
India	11369/DELNP/2015	5 Jun 2014	465034 2 Nov 2023	
Japan	2016-519545	5 Jun 2014	6403763 10 Oct 2018	

Main EP claim:
A device comprising:
a protection sleeve (10) which has a proximal end joined to a first shaft (12) and a distal end joined to a second shaft (14), wherein said first shaft (12) slides over said second shaft (14);
a catheter (16) that passes through a lumen of said second shaft (14), wherein a distal portion (20) of said catheter (16) comprises a medical device; and wherein relative sliding movement of said first and second shafts (12, 14) with respect to each other either causes contraction or expansion of said protection sleeve (10).

IMPACTOR FOR FRACTURING CALCIFICATIONS IN HEART VALVES				
Our Ref 2481GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	62/238250	7 Oct 2015		
PCT	PCT/IB2016/055993	6 Oct 2016		
US	15/766830	9 Apr 2018	10675044 9 June 2020	
US	16/894999 Continuation of 16/087649	8 Jun 2020	11350953 7 June 2022	
Europe	16795412.2	6 Oct 2016	3359063 17 Jun 2020	Validated in Switzerland, Germany, France, UK, Italy, Netherlands, Ireland

Main US claim:
A device for fracturing calcifications in heart valves comprising:
a tube formed with at least two longitudinal slits that form at least two struts, each of said struts comprising two or more pairs of notches formed on opposite sides of the strut, said struts having a contracted orientation in which said struts are not expanded outwards from said tube and an outwardly expanded orientation in which said struts are expanded outwards from said tube and have sufficient strength and rigidity to impact and fracture a calcification in a heart valve; and
wherein the tube comprises a curved waist portion extending between two longitudinally-spaced pairs of said notches, wherein in the outwardly expanded orientation, said waist portion is curved radially inwards and wherein said waist portion is shaped to conform to a ventricular side of a valve leaflet.

REMODELING OF CALCIFIED AORTIC VALVE LEAFLETS				
Our Ref 2534GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	62/315810	31 Mar 2016		
PCT	PCT/IB2017/051798	29 Mar 2017		
US	16/087649	23 Sep 2018	10980553 20 Apr 2021	
Europe	17718608.7	29 Mar 2017	3435891 13 Nov 2019	Validated in Switzerland, Germany, France, UK, Italy, Netherlands, Ireland
China	201780026430.2	29 Mar 2017	109069168 9 Apr 2021	
Japan	2018-550842	29 Mar 2017	6930997 1 Sep 2021	

Main US claim:
A calcification treatment device comprising:
an outer body comprising an inner cavity and at least one outer calcification treatment member facing towards said inner cavity;
an inner body movable into said inner cavity and comprising at least one inner calcification treatment member facing towards an inner surface of said outer body, wherein one of said outer and inner calcification treatment members comprises an expandable treatment member and one of said outer and inner calcification treatment members comprises one or more fracturing elements capable of fracturing a calcification of a valve tissue, wherein said one or more fracturing elements comprise blunt structure distanced from a cutting edge of each of said one or more fracturing elements to limit a cutting depth through soft tissue.

CATHETER BASED DEVICE FOR TREATMENT OF CALCIFIED VALVE LEAFLET				
Our Ref 2576GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	62/412960	26 Oct 2016		
PCT	PCT/IB2017/056657	26 Oct 2017		
US	16/341924	15 April 2019		Pending

Main pending claim:

A method of treating calcification of a heart valve comprising:

providing a device comprising a catheter with proximal and distal ends, said catheter having at its distal end a non-occluding expansion element movable from a closed to an open position, wherein in said open position, said expansion element is configured to apply force to leaflets of a valve so as to forcefully open said leaflets, said expansion element being constructed of a mesh or struts with openings formed therein that allow blood and fluids to flow therethrough

placing the device near leaflets of a heart valve; and

expanding said expansion element against the leaflets to forcefully open said leaflets.

IMPACTOR AND STABILIZER FOR FRACTURING CALCIFICATIONS IN HEART VALVES				
Our Ref 2651GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	15/723379	3 Oct 2017	10624658 21 Apr 2020	
PCT	PCT/IB2018/057667	3 Oct 2018		
US	16/852694 Continuation of 15/723379	20 Apr 2020	11553936 17 Jan 2023	
Europe	18801028.4	3 Oct 2018	3691551 26 Oct 2022	
China	201880064205.2	3 Oct 2018	111163714 11 Aug 2023	
Japan	2020-517864	3 Oct 2018	7155254 7 Oct 2022	
India	202017018688	3 Oct 2018	444474 11 Aug 2023	

Main US claim:
A device for fracturing calcifications in heart valves comprising:
a stabilizer and an impactor movable towards each other, said impactor comprising one or more impactor arms, each of which extends distally from a proximal cap;
said impactor further comprising one or more lever arms each of which is distally coupled to a lever cap and proximally coupled to a corresponding one of said one or more impactor arms, said lever cap being arranged for sliding on a shalt which extends towards said proximal cap, wherein proximal movement of said lever cap towards said proximal cap causes said one or more lever arms to deform and to push against said one or more impactor arms and to cause said one or more impactor arms to deform, and wherein said stabilizer comprises mating structure for engagement with said impactor, wherein each of said one or more lever arms is formed with a pivot.

IMPACTOR AND STABILIZER FOR FRACTURING CALCIFICATIONS IN HEART VALVES				
Our Ref 2891GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	63/048664	7 July 2020		
PCT	PCT/IB2021/056025	6 July 2021		
US	18/004895	3 Jan 2023		Pending
Europe	21756035.8	6 July 2021		Pending
China	202180047709.5	6 July 2021		Pending
Japan	2023-501421	6 July 2021		Pending
India	202317003748	6 July 2021		Pending

Main pending claim:

1. A heart valve treatment device comprising:

a first heart valve treatment member that extends from a first shaft and which comprises a scoring portion; and

a second heart valve treatment member that extends from a second shaft and which comprises a counterforce member, said first and second heart valve treatment members being arranged for sandwiching a portion of a valve anatomy between said scoring portion and said counterforce member, and wherein said first heart valve treatment member is movable with respect to said second heart valve treatment member such that a position and an orientation of said scoring portion is changeable from being parallel to a commissure of the valve or perpendicular thereto.

SHORT - CUT

TRANSCATHETER VALVE LACERATION DEVICE AND METHOD				
Our Ref 2796GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	62/849919	19 May 2019		
US	62/870068	3 July 2019		
PCT	PCT/IB2020/054729	19 May 2020		
US	17/608816	4 Nov 2021		Pending
Europe	20809795.6	19 May 2020		Pending
China	202080036800.2	19 May 2020		Pending
Japan	2021-568877	19 May 2020		Pending
India	202117054213	19 May 2020		Pending

Main pending claim:
A transcatheter valve laceration device comprising:

a leaflet support frame and a leaflet cutting assembly, both of which are movably mounted on a guiding structure and movable between contracted and expanded orientations, wherein in the expanded orientation, a blade protector of said leaflet support frame is positioned over a cutting element of said leaflet cutting assembly.

TRANSCATHETER MITRAL VALVE LACERATION DEVICE AND METHOD				
Our Ref 2975GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	63/220588	12 Jul 2021		Continuation-in-part of 2796 and to be filed only in US to cover mitral valve procedure
US	17/857326	5 Jul 2022		

Main pending claim:

1. A method for lacerating heart tissue comprising:

using a device that comprises a leaflet support frame and a leaflet cutting assembly, both of which are movably mounted on a guiding structure and movable between contracted and expanded orientations, wherein in the expanded orientation, a blade protector of said leaflet support frame is positioned over a cutting element of said leaflet cutting assembly.

introducing said device with said leaflet support frame and said leaflet cutting assembly in contracted orientations to a heart;

expanding said leaflet support frame;

expanding said leaflet cutting assembly; and

moving said leaflet cutting assembly to lacerate heart tissue of a mitral valve located between said cutting element and said blade protector.

FUTURE TECH IP

TRANSCATHETER DEVICE FOR SCORING CALCIFICATIONS AND FOR CUTTING VALVE TISSUE				
Our Ref 2976GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	63/231826	11 Aug 2021		
PCT	PCT/IB2022/057418	9 Aug 2022		National phase to be done 11 Feb 2024

Main pending claim:

1. A transcatheter device comprising:

a first jaw member, a second jaw member and a linkage mechanism coupled to said first and second jaw members for changing a distance between said first and second jaw members;

at least one of said first and second jaw members comprising scoring structure capable of scoring calcifications or tissue or any other anatomical structure, wherein a direction of a scoring force applied by said scoring structure is along a jaw closing axis that extends between surfaces of said first and second jaw members, respectively, which face each other; and

wherein said first jaw member comprises a cutting element arranged to cut in a cutting direction transverse to said jaw closing axis.

EXPANSION OF PROSTHETIC VALVE DEVICE				
Our Ref 3042GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	63/396971	11 Aug 2022		
PCT	PCT/IB2023/058029	9 Aug 2023		National phase 11 Feb 2025

Main pending claim:

1. An expansion device comprising:

expandable arms and a linkage mechanism coupled to said expandable arms for expanding said expandable arms from a contracted position to an expanded position and for contracting said expandable arms back to the contracted position;

wherein an outward facing surface of at least one of said expandable arms comprises a gripping structure which prevents said at least one of said expandable arms from slipping away from a narrow portion of a prosthetic valve.

HEART VALVE TISSUE CUTTING DEVICE				
Our Ref 3072GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	63/439904	19 Jan 2023		
				PCT to be filed 19 Jan 2024 – about $3600

HEART VALVE TISSUE CUTTING DEVICE (AORTIC)				
Our Ref 3077GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	63/489196	9 Mar 2023		
				PCT to be filed 9 Mar 2024 – about $3600

CENTERING STABILIZER FOR HEART VALVE DEVICE				
Our Ref 3104GOL				
Assigned to Pi-Cardia Ltd.				
Country	Application No.	Filing Date	Grant	Last Action
US	63/516519	30 Jul 2023		
				PCT to be filed 30 Jul 2024 – about $3600