

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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EDWARDS LIFESCIENCES CORPORATION,  
Petitioner,

v.

ENDOHEART AG  
Patent Owner.

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Case IPR2016-00300  
U.S. Patent No. 8,182,530

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**REPLACEMENT PETITION**

FOR *INTER PARTES* REVIEW OF CLAIMS 1 AND 6 OF

U.S. PATENT NO. 8,182,530

UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104

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**LIST OF EXHIBITS**

No.	Exhibit
1001	U.S. Patent No. 8,182,530 (“the ‘530 patent”).
1002	Prosecution History for U.S. Patent Application No. 11/023,783, which matured into the ‘530 patent (“‘783 Patent Application”).
1003	U.S. Provisional Patent Application No. 60/615,009, provisional application to which the ‘530 patent claims priority (“‘009 Provisional Patent Application”).
1004	Bergheim, Bjarne. “Method and System for Cardiac Valve Delivery.” <i>U.S. Patent Application Publication No. 2005/0240200</i> (filed 2004) (“Bergheim”).
1005	Lattouf, Omar M. “Treatment for Patient with Congestive Heart Failure.” <i>U.S. Patent Application Publication No. 2003/0130571</i> (2003) (“Lattouf”).
1006	Huber, Christoph H., et al. “Direct-Access Valve Replacement: A Novel Approach for Off-Pump Valve Implantation Using Valved Stents.” <i>J Am Coll Cardiol</i> , 46(2):366-370, 369 (2005).
1007	Andersen, Henning R., et al. “Transluminal Implantation of Artificial Heart Valves. Description of a New Expandable Aortic Valve and Initial Results with Implantation by Catheter Technique in Closed Chest Pigs.” <i>Eur Heart J</i> , 13:704-708 (1992) (“Andersen”).
1008	Bonhoeffer, Philipp, et al. “Percutaneous Replacement of Pulmonary Valve in a Right-Ventricle to Pulmonary-Artery Prosthetic Conduit with Valve Dysfunction.” <i>Lancet</i> , 356:1403-1405 (2000).
1009	Cribier, Alain, et al. “Percutaneous Transcatheter Implantation of an Aortic Valve Prosthesis for Calcific Aortic Stenosis.” <i>Circulation</i> , 106:3006-3008 (2002) (“Cribier”).
1010	Spenser, Benjamin, et al. “Implantable Prosthetic Valve.” <i>U.S. Patent Publication No. 2003/0114913</i> (2003) (“Spenser”).
1011	Zhou, Jun Qing, et al. “Self-Expandable Valved Stent of Large Size: Off-Bypass Implantation in Pulmonary Position.” <i>Eur J Cardio-Thorac Surg</i> , 24:212-216 (2003) (“Zhou”).
1012	Golding, Leonard, A. R. “New Cannulation Technique for the Severely Calcified Ascending Aorta.” <i>J Thorac Cardiovasc Surg</i> , 90(4):626-627, 626 (Oct., 1985) (“Golding”).
1013	Wong, C. M., et al. “Percutaneous Left Ventricular Angiography.” <i>Catheter Cardio Diag</i> , 7:425-432 (1981) (“Wong”).

1014	Lurie, Paul R., et al. "An Apical Technic for Catherization of the Left Side of the Heart Applied to Infants and Children." <i>New Engl J Med</i> , 264(23):1182-1187 (1961) ("Lurie").
1015	Maxwell, Darryl, et al. "Balloon Dilatation of the Aortic Valve in the Fetus: A Report of Two Cases." <i>Br Heart J</i> , 65:256-258 (1991) ("Maxwell").
1016	Neish, Steven R., et al. "Intraoperative Balloon Valvuloplasty for Critical Aortic Valvular Stenosis in Neonates." <i>Am J Cardiol</i> , 68:807- 810 (1991) ("Neish").
1017	Tworetzky, Wayne, et al. "Balloon Dilation of Severe Aortic Stenosis in the Fetus: Potential for Prevention of Hypoplastic Left Heart Syndrome Candidate Selection, Technique, and Results of Successful Intervention." <i>Circulation</i> , 110:2125-2131 (2004) ("Tworetzky").
1018	Haase, Karl, et al. "Method and Apparatus for Crossing a Heart Valve." <i>U.S. Patent Application Publication No. 2004/0153135</i> (2004) ("Haase").
1019	Biagtan, Emmanuel, et al. "Guide Wire with Operator Controllable Tip Stiffness." <i>U.S. Patent No. 6,146,339</i> (2000) ("Biagtan").
1020	Mortier, Todd J., et al. "Transventricular Implant Tools and Devices." <i>U.S. Patent No. 6,746,471</i> (filed 2001) ("Mortier").
1021	Gabbay, Shlomo. "Low Invasive Implantable Cardiac Prosthesis and Method for Helping Improve Operation of a Heart Valve." <i>U.S. Patent Application Publication No. 2003/0199975</i> (2003) ("Gabbay").
1022	Seguin, Jacques, et al. "Prosthetic Valve for Transluminal Delivery." <i>U.S. Patent Application Publication No. 2004/0093060</i> (filed 2003) ("Seguin I").
1023	Seguin, Jacques, et al. "Prosthetic Valve for Transluminal Delivery." <i>U.S. Patent Application Publication No. 2004/0210304</i> (filed 2004) ("Seguin II").
1024	Semple, T. "Left Heart Catherization by Direct Ventricular Puncture." <i>Brit Heart J</i> , 30:402-406 (1968) ("Semple").
1025	U.S. Provisional Patent Application No. 60/340,062, provisional application to which Lattouf (Ex. 1005) claims priority ("062 Provisional Patent Application").
1026	Declaration of Dr. John R. Garret, M.D.
1027	Endoheart AG's Responsive Claim Construction Brief filed Nov. 20, 2015 in the United States District Court for the District of Delaware,

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