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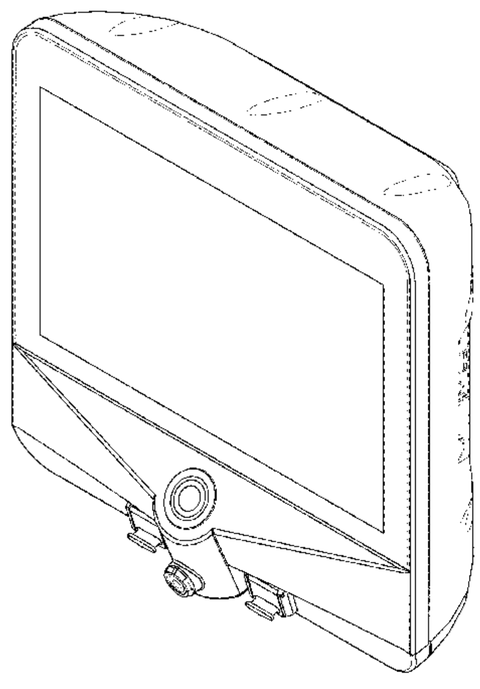
(56) **References Cited**

U.S. PATENT DOCUMENTS

3,650,277	A		3/1972	Sjostrand et al.	
4,658,819	A		4/1987	Harris et al.	
5,035,694	A	*	7/1991	Kasprzyk	A61B 18/08 604/913
5,255,679	A	*	10/1993	Imran	A61B 5/0422 600/375
5,300,068	A	*	4/1994	Rosar	A61B 18/1492 606/32
D351,655	S	*	10/1994	Smith	D24/143
5,368,591	A		11/1994	Lennox et al.	
5,387,233	A		2/1995	Alferness et al.	
D359,353	S	*	6/1995	Butter	D24/144
5,465,717	A		11/1995	Imran et al.	
5,531,779	A		7/1996	Dahl et al.	
5,598,848	A		2/1997	Swanson et al.	
5,607,462	A		3/1997	Imran	
5,628,313	A		5/1997	Webster, Jr.	
5,676,662	A		10/1997	Fleischhacker et al.	
5,707,400	A		1/1998	Terry, Jr. et al.	
5,769,077	A		6/1998	Lindegren	
5,772,590	A		6/1998	Webster, Jr.	
5,893,885	A		4/1999	Webster, Jr.	
5,897,553	A		4/1999	Mulier et al.	
D411,622	S	*	6/1999	Hall	D24/144
5,954,649	A	*	9/1999	Chia	A61B 5/0422 600/424
5,954,719	A	*	9/1999	Chen	A61B 18/1206 606/34
6,004,269	A		12/1999	Crowley et al.	
6,012,457	A		1/2000	Lesh	
6,016,437	A		1/2000	Tu et al.	
6,024,740	A		2/2000	Lesh et al.	
6,073,048	A		6/2000	Kieval et al.	
6,096,037	A		8/2000	Mulier et al.	
6,117,101	A		9/2000	Diederich et al.	
6,161,543	A		12/2000	Cox et al.	
6,178,349	B1		1/2001	Kieval	
6,200,312	B1		3/2001	Zikorus et al.	
6,216,044	B1		4/2001	Kordis	
6,233,491	B1		5/2001	Kordis et al.	
6,283,951	B1		9/2001	Flaherty et al.	
6,287,608	B1		9/2001	Levin et al.	
6,292,695	B1		9/2001	Webster, Jr. et al.	
6,322,559	B1		11/2001	Daulton et al.	
6,460,545	B2		10/2002	Kordis	
6,522,926	B1		2/2003	Kieval et al.	
D477,408	S	*	7/2003	Bromley	D24/170
6,613,045	B1		9/2003	Laufer et al.	
6,616,624	B1		9/2003	Kieval	
6,635,054	B2		10/2003	Fjield et al.	
6,656,174	B1		12/2003	Hegde et al.	
6,669,655	B1		12/2003	Acker et al.	
6,699,231	B1		3/2004	Sterman et al.	
D491,666	S	*	6/2004	Kimmell	D24/170
6,748,255	B2		6/2004	Fuimaono et al.	
6,805,131	B2		10/2004	Kordis	
6,845,267	B2		1/2005	Harrison et al.	



6,954,977	B2	10/2005	Maguire et al.	
6,970,730	B2	11/2005	Fuimaono et al.	
7,122,031	B2	10/2006	Edwards et al.	
7,149,574	B2	12/2006	Yun et al.	
7,155,284	B1	12/2006	Whitehurst et al.	
7,162,303	B2	1/2007	Levin et al.	
7,245,955	B2	7/2007	Rashidi	
D550,357	S *	9/2007	Hayamizu	D24/107
D552,241	S *	10/2007	Bromley	D24/170
7,291,146	B2	11/2007	Steinke et al.	
D567,761	S	4/2008	Waaler et al.	
7,363,076	B2	4/2008	Yun et al.	
D574,323	S *	8/2008	Waaler	D13/112
7,419,486	B2	9/2008	Kampa	
7,465,288	B2	12/2008	Dudney et al.	
7,468,062	B2	12/2008	Oral et al.	
7,481,803	B2	1/2009	Kesten et al.	
7,653,438	B2	1/2010	Deem et al.	
7,717,948	B2 *	5/2010	Demarais	A61F 7/123 606/32
7,742,795	B2	6/2010	Stone et al.	
7,850,685	B2	12/2010	Kunis et al.	
7,949,407	B2	5/2011	Kaplan et al.	
8,145,316	B2	3/2012	Deem et al.	
8,224,416	B2	7/2012	de la Rama et al.	
8,343,213	B2	1/2013	Salahieh et al.	
8,347,891	B2	1/2013	Demarais et al.	
8,442,639	B2	5/2013	Walker et al.	
8,454,594	B2	6/2013	Demarais et al.	
D687,146	S *	7/2013	Juzkiw	D24/170
8,545,495	B2	10/2013	Scheib	
D695,407	S *	12/2013	Price	D24/170
D704,839	S *	5/2014	Juzkiw	D24/170
D712,352	S *	9/2014	George	D13/112
D712,353	S	9/2014	George et al.	
D712,833	S *	9/2014	George	D13/112
9,022,948	B2	5/2015	Wang	
2002/0068885	A1	6/2002	Harhen et al.	
2002/0120304	A1	8/2002	Mest	
2003/0050681	A1	3/2003	Pianca et al.	
2003/0060858	A1	3/2003	Kieval et al.	
2003/0074039	A1	4/2003	Puskas	
2003/0114739	A1	6/2003	Fuimaono et al.	
2003/0216792	A1	11/2003	Levin et al.	
2003/0233099	A1	12/2003	Danaek et al.	
2004/0215186	A1	10/2004	Cornelius et al.	
2005/0288730	A1	12/2005	Deem et al.	
2006/0089678	A1	4/2006	Shalev	
2007/0135875	A1	6/2007	Demarais et al.	
2008/0255478	A1	10/2008	Burdette	
2009/0076409	A1	3/2009	Wu et al.	
2010/0016762	A1	1/2010	Thapliyal et al.	
2010/0094209	A1	4/2010	Drasler et al.	
2010/0168737	A1	7/2010	Grunewald	
2010/0249773	A1	9/2010	Clark et al.	
2010/0268307	A1	10/2010	Demarais et al.	
2010/0286684	A1	11/2010	Hata et al.	
2011/0004087	A1	1/2011	Fish et al.	
2011/0118726	A1	5/2011	de la Rama et al.	
2011/0137298	A1	6/2011	Nguyen et al.	
2011/0160720	A1	6/2011	Johnson	
2011/0213231	A1	9/2011	Hall et al.	
2011/0257641	A1	10/2011	Hastings et al.	
2011/0264011	A1	10/2011	Wu et al.	
2011/0264086	A1	10/2011	Ingle	
2012/0143097	A1	6/2012	Pike, Jr.	
2012/0143298	A1	6/2012	Just et al.	
2012/0296232	A1	11/2012	Ng	
2012/0323233	A1	12/2012	Maguire et al.	
2013/0116737	A1	5/2013	Edwards et al.	
2013/0131743	A1	5/2013	Yamasaki et al.	
2013/0144251	A1	6/2013	Sobotka	
2013/0172715	A1	7/2013	Just et al.	
2014/0330266	A1 *	11/2014	Thompson	A61B 18/1206 606/34

FOREIGN PATENT DOCUMENTS

WO	97/45157	12/1997
WO	00/66020	11/2000
WO	01/00273	1/2001
WO	01/22897	4/2001
WO	02/26314	4/2002
WO	03/082080	10/2003
WO	2006/041881	4/2006
WO	2007/149970	12/2007
WO	2008/141150	11/2008
WO	2008/151001	12/2008
WO	2012/064818	5/2012
WO	2012/106492	8/2012

OTHER PUBLICATIONS

Jaff, Michael R. et al, Kidney Stenting Lowers Blood Pressure in Patients with Severe Hypertension; Catheterization and Cardiovascular Interventions; Published Online: Jun. 27, 2012 (DOI: 10.1002/ccd24449); Print Issue Date: Sep. 2012. URL: http://onlinelibrary.wiley.com/doi/10.1002/ccd.24449/abstract.

Jain, Mudit K. et al, A Three-Dimensional Finite Element Model of Radiofrequency Ablation with Blood Flow and Its Experimental Validation, Annals of Biomedical Engineering, vol. 28, pp. 1075-1084, 2000.

Jais, Pierre et al, Efficacy and Safety of Septal and Left-Atrial Linear Ablation for Atrial Fibrillation, The American Journal of Cardiology, vol. 84 (9A), Nov. 1999, 139R-146R.

Janssen, Ben J.A. et al, Frequency-Dependent Modulation of Renal Blood Flow by Renal Nerve Activity in conscious Rabbits, American Journal of Physiology, 1997, 273:R597-R608.

Janssen, Ben J.A. et al, Renal Nerves in Hypertension, Miner Electrolyte Metab 1989;15:74-82.

Jin, Yu et al, No Support for Renal Denervation in a Meta-Analysis, JACC vol. 62, No. 21, 2013 Correspondence Nov. 19/26, 2013:2029-30.

Kaltenbach, Benjamin et al, Renal Artery Stenosis After Renal Sympathetic Denervation, J Am Coll Cardiol. Dec. 25, 2012;60(25):2694-5.

Kaltenbach, Benjamin et al, Renal Sympathetic Denervation as Second-Line Therapy in Mild Resistant Hypertension: A Pilot Study, Catheterization and Cardiovascular Interventions 81:335-339; Feb. 2013.

Kamiya, Atsunori et al, Parallel Resetting of Arterial Baroreflex Control of Renal and Cardiac Sympathetic Nerve Activities During Upright Tilt in Rabbits, Am J Physiol Heart Circ Physiol 298: H1966-H1975, 2010.

Kandzari, David E. et al, Catheter-Based Renal Denervation for Resistant Hypertension: Rationale and Design of the Symplicity HTN-3 Trial, Clin. Cardiol 35, 9, 528-535 (2012).

Kapural, Leonardo et al, Radiofrequency Ablation for Chronic Pain Control, Current Pain and Headache Reports 2001,5:517-525.

Kassab, Salah et al, Renal Denervation Attenuates the Sodium Retention and Hypertension Associated with obesity, Hypertension vol. 25, No. 4, Part 2 Apr. 1995.

Katholi, Richard E et al, Decrease in Peripheral Sympathetic Nervous System Activity following Renal Denervation or Unclipping in the One-Kidney One-Clip Goldblatt Hypertensive Rat, The Journal of Clinical Investigation, Jan. 1982;69(1):55-62.

Katholi, Richard E. et al, Role of the Renal Nerves in the Pathogenesis of One-Kidney Renal Hypertension in the Rat, Hypertension. 1981;3:404-409.

Katholi, Richard E. et al, The Role of Renal Sympathetic Nerves in Hypertension: Has Percutaneous Renal Denervation Refocused Attention on Their Clinical Significance?; Progress in Cardiovascular Disease 52 (2009) 243-248.

Katritsis, Demosthenes et al, Recurrence of Left Atrium-Pulmonary Vein Conduction Following Successful Disconnection in Asymptomatic Patients, Europace (2004) 6, 425e432.

Killip III, Thomas, Oscillation of Blood Flow and Vascular Resistance During Mayer Waves, Circulation Research, vol. XI, Dec. 1962, 987-993.

Kingwell, Bronwyn A. et al, Assessment of Gain of Tachycardia and Bradycardia Responses of Cardiac Baroreflex, Am J Physiol Heart Circ Physiol 260:H1254-H1263, 1991.

Kirchheim, H. et al, Sympathetic Modulation of Renal Hemodynamics, Renin Release and Sodium Excretion, Klin Wochenschr (1989) 67: 858-864.
Klein, GE et al, Endovascular Treatment of Renal Artery Aneurysms with Conventional Non-Detachable Microcoils and Guglielmi Detachable Coils, Br J Urol. Jun. 1997; 79(6):852-860.
Knight, Eric L. et al, Predictors of Decreased Renal Function in Patients with Heart Failure During Angiotensin-Converting Enzyme Inhibitor Therapy: Results from the Studies of Left Ventricular Dysfunction (SOLVD), American Heart Journal, vol. 138, No. 5, Part 1, Nov. 1999, 849-855.
Koepke, John P. et al, Functions of the Renal Nerves, The Physiologist, vol. 28, No. 1, Feb. 1985, 47-52.
Kompanowska-Jezierska, Elzbieta et al, Early Effects of Renal Denervation in the Anaesthetised Rat: Natriuresis and Increased Cortical Blood Flow, Journal of Physiology (2001), 531.2, pp. 527-534.
Krum, Henry et al, Catheter-Based Renal Sympathetic Denervation for Resistant Hypertension: A Multicentre Safety and Proof-of-Principle Cohort Study, www.thelancet.com vol. 373 Apr. 11, 2009 1275-1281.
Krum, Henry et al, Device-Based Antihypertensive Therapy: Therapeutic Modulation of the Autonomic Nervous System, Circulation. 2011;123:209-215.
La Grange, Ronald G. et al, Selective Stimulation of Renal Nerves in the Anesthetized Dog: Effect on Renin Release During Controlled Changes in Renal Hemodynamics, Circulation Research, Journal of The American Heart Association, 1973;33:704-712.
Labeit, Alexander Michael et al, Changes in the Prevalence, Treatment and Control of Hypertension in Germany? A Clinical-Epidemiological Study of 50.000 Primary Care Patients, PLOS One, Dec. 2012, vol. 7, Issue 12, e52229, 1-11.
Labonte, Sylvain, Numerical Model for Radio-Frequency Ablation of the Endocardium and its Experimental Validation, IEEE Transactions on Biomedical Engineering, vol. 41, No. 2. Feb. 1994, 108-115.
Lambert, Gavin W. et al, Health-Related Quality of Life After Renal Denervation in Patients With Treatment-Resistant Hypertension, Hypertension. 2012;60:1479-1484.
Lee, Sang Joon et al, Ultrasonic Energy in Endoscopic Surgery, Yonsei Medical Journal, vol. 40, No. 6, pp. 545-549, 1999.
Leertouwer, Trude C. et al, In-Vitro Validation, with Histology, of Intravascular Ultrasound in Renal Arteries, Journal of Hypertension 1999, vol. 17 No. 2, 271-277.
Leishman, A.W.D., Hypertension—Treated and Untreated, British Medical Journal, May 1959, 1361-1368.
Leonard, Bridget L. et al, Differential Regulation of the Oscillations in Sympathetic Nerve Activity and Renal Blood Flow Following Volume Expansion, Autonomic Neuroscience: Basic and Clinical 83 (2000) 19-28.
Levin, Stephen, Ardian: Succeeding Where Drugs Fail Treating Hypertension in the Cath Lab, In Vivo: The Business & Medicine Report, vol. 27, No. 10, Nov. 2009.
Litynski, Grzegorz S., Kurt Semm and the Fight against Skepticism: Endoscopic Hemostasis, Laparoscopic Appendectomy, and Semm's Impact on the "Laparoscopic Revolution", JSLS. Jul.-Sep. 1998; 2(3): 309-313.
Lu, David S.K. et al, Effect of Vessel Size on Creation of Hepatic Radiofrequency Lesions in Pigs: Assessment of the "Heat Sink" Effect, American Journal of Radiology, 178, Jan. 2002, 47-51.
Luscher, Thomas F. et al, Renal Nerve Ablation After Symplicity HTN-3: Confused at the Higher Level?; European Heart Journal, doi:10.1093/eurheartj/ehu195; May 14, 2014.
Lustgarten, Daniel L. et al, Cryothermal Ablation: Mechanism of Tissue Injury and Current Experience in the Treatment of Tachyarrhythmias, Progress in Cardiovascular Diseases, vol. 41, No. 6 (May/Jun.), 1999: pp. 481-498.
Mahfoud, Felix et al, Expert Consensus Document from the European Society of Cardiology on Catheter-Based Renal Denervation, European Heart Journal, Apr. 25, 2013; 34(28):2149-57.
Mancia, Giuseppe et al, Sympathetic Activation in the Pathogenesis of Hypertension and Progression of Organ Damage, Hypertension Journal of The American Heart Association, 1999, 34:724-728.
McGahan, John P. et al, History of Ablation, Tumor Ablation, 2005, pp. 3-16.
Medtronic, Inc., J.P. Morgan Healthcare Conference, Corrected Transcript, Jan. 13, 2014, Factset:Callstreet, www.callstreet.com.
Medtronic, Inc. Medtronic Announces U.S. Renal Denervation Pivotal Trial Fails to Meet Primary Efficacy Endpoint While Meeting Primary Safety Endpoint, www.medtronic.com, Jan. 9, 2014.
Medtronic, Inc., RDN Therapy with the Symplicity Renal Denervation System, Procedure Fact Sheet, www.medtronic.com, 2011.
Medtronic, Inc., Renal Denervation (RDN) Novel Catheter-based Treatment for Hypertension, Symplicity RDN System Common Q&A, 2011.
Medtronic, Inc., Scientific Basis Behind Renal Denervation for the Control of Hypertension, Dec. 2012, http://www.icimeeting.com/2012/images/stories/PDF/1448_Wilcox_I_Mon.pdf.
Mehdirad, Ali et al, Temperature Controlled RF Ablation in Canine Ventricle and Coronary Sinus using 7 Fr or 5 Fr Oblation Electrodes, PACE, vol. 21, Jan. 1998, Part II, 316-321.
Meredith, I T et al, Exercise Training Lowers Resting Renal But Not Cardiac Sympathetic Activity in Humans; Hypertension Journal of The American Heart Association, 1991;18:575-582.
Michaelis, Lawrence L. et al, Effects of Renal Denervation and Renin Depletion on the Renal Responses to Intravascular Volume Expansion, Ann Surg. Mar. 1972; 175(3): 424-430.
Millard, F.C. et al, Renal Embolization for Ablation of Function in Renal Failure and Hypertension, Postgraduate Medical Journal (1989) 65, 729-734.
Moak, Jeffrey P. et al, Case Report: Pulmonary Vein Stenosis Following RF Ablation of Paroxysmal Atrial Fibrillation: Successful Treatment with Balloon Dilation, Journal of Interventional Cardiac Electrophysiology, Dec. 2000, 4, 4:621-631.
Mogil, Robert A. et al, Renal Innervation and Renin Activity in Salt Metabolism and Hypertension, American Journal of Physiology, vol. 216, No. 4, Apr. 1969, 693-697.
Morita, Hironobu et al, Neural Control of Urinary Sodium Excretion During Hypertonic NaC1 Load in Conscious Rabbits: Role of Renal and Hepatic Nerves and Baroreceptors, Journal of the Autonomic Nervous System, 34 (1991) 157-170.
Morrissey, D.M. et al, Sympathectomy in the Treatment of Hypertension, The Lancet, Feb. 1953, 403-408.
Mortara, Andrea et al, Nonselective Beta-Adrenergic Blocking Agent, Carvedilol, Improves Arterial Baroflex Gain and Heart Rate Variability in Patients With Stable Chronic Heart Failure, Journal of the American College of Cardiology, vol. 36, No. 5, 2000, 1612-1618.
Moss, Jonathan, Interventional Radiology and Renal Denervation, Interventions, vol. 13, Issue 3, 2013; Nov. 28, 2013.
Naghavi, Morteza et al, Thermography Basket Catheter: In Vivo Measurement of the Temperature of Atherosclerotic Plaques for Detection of Vulnerable Plaques, Catheterization and Cardiovascular Interventions 59:52-59 (2003).
Naidoo, N. et al, Thoracic Splanchnic Nerves: Implications for Splanchnic Denervation, Journal of Anatomy, Nov. 2001;199(Pt 5):585-590.
Nakagawa, A. et al, Selective Ablation of Porcine and Rabbit Liver Tissue Using Radiofrequency: Preclinical Study, European Surgical Research, 1999;31:371-379.
Nakagawa, Hiroshi et al, Inverse Relationship Between Electrode Size and Lesion Size During Radiofrequency Oblation With Active Electrode Cooling, Circulation. Aug. 4, 1998;98(5):458-465.
Nanni, Gregg S. et al, Control of Hypertension by Ethanol Renal Ablation, Radiology 148: 51-54, Jul. 1983.
Ndegwa, S., Catheter-Based Renal Denervation for Treatment-Resistant Hypertension [Issues in emerging health technologies issue 121]. Ottawa: Canadian Agency for Drugs and Technologies in Health; Mar. 2013.
Neutel, Joel M., Hypertension and Its Management: A Problem in Need of New Treatment Strategies, Journal of Renin-Angiotensin-Aldosterone System 2000 1: S10-S13.
Newcombe, C.P. et al, Sympathectomy for Hypertension, British Medical Journal, Jan. 1959, 142-144.
Ng, Fu Siong et al, Catheter Ablation of Atrial Fibrillation, Clinical Cardiology, 25, 384-394 (2002).
Norman, Roger A. et al, Role of the Renal Nerves in One-Kidney, One Clip Hypertension in Rats, Hypertension Journal of The American Heart Association, 1984;6:622-626.
Nozawa, Takashi et al, Effects of Long-Term Renal Sympathetic Denervation on Heart Failure After Myocardial Infarction in Rats, Heart Vessels (2002) 16:51-56.

O'Connor, Brian K. et al, Radiofrequency Ablation of a Posteroseptal Accessory Pathway Via the Middle Cardiac Vein in a Six-Year-Old Child, PACE, vol. 20, Oct. 1997, Part 1, 2504-2507.
O'Hagen, Kathleen P. et al, Renal Denervation Decreases Blood Pressure in DOCA-Treated Miniature Swine With Established Hypertension, American Journal of Hypertension, 1990; 3:62-64.
Oliveira, Vera L.L. et al, Renal Denervation Normalizes Pressure and Baroreceptor Reflex in High Renin Hypertension in Conscious Rats, Hypertension vol. 19, No. 2 Feb. 1992, Supplement II, II-17-II-21.
Omran, Heyder et al, Echocardiographic Imaging of Coronary Sinus Diverticula and Middle Cardiac Veins in Patients with Preexcitation Syndrome: Impact—on Radiofrequency Catheter Ablation of Posteroseptal Accessory Pathways, PACE, vol. 18, Jun. 1995, 1236-1243.
Oparil, Suzanne et al, Renal Nerve Ablation: Emerging Role in Therapeutics; Blood Pressure, Oct. 2011, vol. 20, No. 5 , pp. 253-255.
Oral, Hakan et al, Pulmonary Vein Isolation for Paroxysmal and Persistent Atrial Fibrillation, Circulation Journal of The American Heart Association, 2002;105:1077-1081.
Osborn, Jeffrey L. et al, Long-Term Increases in Renal Sympathetic Nerve Activity and Hypertension, Clinical and Experimental Pharmacology and Physiology (1997) 24,72-76.
Osborn, John W., The Sympathetic Nervous System and Long-Term Regulation of Arterial Pressure: What Are the Critical Questions?, Clinical and Experimental Pharmacology and Physiology (1997) 24, 68-71.
Ou, Baiqing et al, Baroreflex Sensitivity Predicts the Induction of Ventricular Arrhythmias by Cesium Chloride in Rabbits, Japanese Circulation Journal, 1999; 63: 783-788.
Oz, Mehmet, Pressure Relief, TIME Magazine, Monday, Jan. 9, 2012.
Page, Irvine H. et al, Mechanisms, Diagnosis and Treatment of Hypertension of Renal Vascular Origin, Annal of Internal Medicine, Aug. 1959, vol. 51, No. 2, 196-211.
Page, Irvine H. et al, Mechanisms, Diagnosis and Treatment of Hypertension of Renal Vascular Origin; Annals of Internal Medicine, Aug. 1959;51:196-211.
Page, Irvine H. et al, The Effect of Renal Denervation on the Level of Arterial Blood Pressure and Renal Function in Essential Hypertension, Journal of Clinical Investigation, 1935;14(1):27-30.
Page, Irvine H. et al, The Effects of Renal Denervation on Patients Suffering from Nephritis, J Clin Invest. 1935;14(4):443-458.
Page, Irvine H., The Effect of Renal Efficiency of Lowering Arterial Blood Pressure in Cases of Essential Hypertension and Nephritis, Journal of Clinical Investigation, Nov. 1934; 13(6): 909-915.
Page, Max, Section of Surgery, Discussion on the Surgical Treatment of Hypertension, Proceedings of the Royal Society of Medicine, vol. XLI, Feb. 1948, 359-372.
Papademetriou, Vasilios, Hypertension and the Simplicity Renal Denervation System, Scientific Background, www.medtronic.com, 2011.
Pappone, Carlo et al, Circumferential Radiofrequency Ablation of Pulmonary Vein Ostia: A New Anatomic Approach for Curing Atrial Fibrillation, Circulation, Journal of The American Heart Association, 2000;102:2619-2628.
Parati, Gianfranco et al, The Human Sympathetic Nervous System: Its Relevance in Hypertension and Heart Failure, European Heart Journal (2012) 33, 1058-1066.
Parmar, Arundhati, Analyst: Medtronic Will Likely Acquire Another Hypertension Therapy Firm, Medcity News, Apr. 27, 2012; 3:06 p.m.; medcitynews.com.
Pavlovich, Christian P. et al, Percutaneous Radio Requency Ablation of Small Renal Tumors: Initial Results; The Journal of Urology, vol. 167, Jan. 10-15, 2002.
Pearce, John A. et al, Blood Vessel Architectural Features and Their Effect on Thermal Phenomena, Critical Reviews, vol. CR75, Bellingham, WA: SPIE Optical Engineering Press; 2000, p. 231-277.
Peet, Max Minor, Hypertension and Its Surgical Treatment by Bilateral Supradiaphragmatic Splanchnicectomy, American Journal of Surgery, vol. 75, Issue 1, Jan. 1948, 48-68.
Perry, C. Bruce, Malignant Hypertension Cured by Unilateral Nephrectomy, British Heart Journal, Jul. 1945; 7(3): 139-142.
Persu, Alexandre et al, Renal Denervation: Ultima Ratio or Standard in Treatment-Resistant Hypertension, Hypertension Journal of The American Heart Association, Sep. 2012;60(3):596-606.
Peterson, Helen Hogh et al, Lesion Dimensions During Temperature-Controlled Radiofrequency Catheter Ablation of Left Ventricular Porcine Myocardium Impact of Ablation Site, Electrode Size, and Convective Cooling, Circulation Journal of The American Heart Association, 1999;99:319-325.
Plouin, Pierre-Francois et al, Blood Pressure Outcome of Angioplasty in Atherosclerotic Renal Artery Stenosis A Randomized Trial, Hypertension Journal of The American Heart Association, 1998;31:823-829.
Poutasse, Eugene F., Surgical Treatment of Renal Hypertension, American Journal of Surgery, vol. 107, Jan. 1964, 97-103.
Pugsley, M.K. et al, The Vascular System An Overview of Structure and Function, Journal of Pharmacological and Toxicological Methods 44 (2000) 333-340.
Putney, John Paul, Are Secondary Considerations Still "Secondary"?:An Examination of Objective Indicia of Nonobviousness Five Years After KSR, Intellectual Property Brief, vol. 4, Issue 2, Article 5, 2012, 45-59.
Ramsay, Lawrence E. et al, Blood Pressure Response to Percutaneous Transluminal Angioplasty for Renovascular Hypertension: An Overview of Published Series; British Medical Journal Mar. 3, 1990; 300(6724): 569-572.
Rippy, Marian K. et al, Catheter-Based Renal Sympathetic Denervation: Chronic Preclinical Evidence for Renal Artery Safety, Clin Res Cardiol (2011) 100:1095-1101.
Ritz, Eberhard, New Approaches to Pathogenesis and Management of Hypertension, Clin J Am Soc Nephrol 4: 1886-1891, 2009.
Dibona, Gerald F., Renal Innervation and Denervation: Lessons from Renal Transplantation Reconsidered, Artificial Organs, vol. 11, No. 6, 1987, 457-462.
Dibona, Gerald F., Role of the Renal Nerves in Renal Sodium Retention and Edema Formation, Trans Am Clin Climatol Assoc. 1990; 101: 38-45.
Dibona, Gerald F., Sympathetic Nervous System and Hypertension, Hypertension Journal of The American Heart Association, Jan. 28, 2013; 61: 556-560.
Dibona, Gerald F., Sympathetic Nervous System and the Kidney in Hypertension, Curr Opin Nephrol Hypertens. Mar. 2002;11(2):197-200.
Dibona, Gerald F., The Sympathetic Nervous System and Hypertension, Hypertension Journal of The American Heart Association, Vo. 43, Feb. 2004, 147-150.
Doumas, Michael et al, Interventional Management of Resistant Hypertension, The Lancet, vol. 373, Apr. 11, 2009, pp. 1228-1230.
Dubuc, Marc et al, Feasibility of Cardiac Cryoablation Using a Transvenous Steerable Electrode Catheter, Journal of Interventional Cardiac Electrophysiology, 1998, 2: 285-292.
Elmula, Fadl et al, Renal Sympathetic Denervation in Patients With Treatment-Resistant Hypertension After Witnessed Intake of Medication Before Qualifying Ambulatory Blood Pressure, Hypertension. Jul. 8, 2013;62:526-532.
Esler, M. et al, Sympathetic Nerve Activity and Neurotransmitter Release in Humans: Translation from Pathophysiology into Clinical Practice, Scandinavian Physiological Society, 2003, 177, 275-284.
Esler, Murray D. et al, Renal Sympathetic Denervation in Patients with Treatment-Resistant Hypertension (The Symplicity HTN-2 Trial): A Randomised Controlled Trial, Lancet, 2010; 376:1903-1909.
Esler, Murray et al, Assessment of Human Sympathetic Nervous System Activity from Measurements of Norepinephrine Turnover, Hypertension Journal of The American Heart Association, vol. 11, No. 1, Jan. 1988, 3-20.
Evelyn, Kenneth A. et al, Effect of Thoracolumbar Sympathectomy on the Clinical Course of Primary (Essential) Hypertension, American Journal of Medicine, Feb. 1960, 188-221.
Freyberg, R. H. et al, The Effect on the Kidney of Bilateral Splanchnicectomy in Patients with Hypertension, The Journal of Clinical Investigation, vol. 16, Issue 1, Jan. 1937, 49-65.
Gafoor, Sameer et al, Nonresponders to Renal Denervation for Resistant Hypertension, Endovascular Today, Oct. 2013, 63-70.
Garel, L. et al, Fatal Outcome After Ethanol Renal Ablation in Child with End-Stage Kidneys; AJR 146:593-594, Mar. 1986.

Gazdar, A. F. et al, Neural Degeneration and Regeneration in Human Renal Transplants, The New England Journal of Medicine, vol. 238, No. 5, Jul. 1970, 222-224.
Goldberg, Michael R. et al, Reconstructive Vascular Surgery for Renovascular Hypertension, Can Med Assoc J. Feb. 2, 1974;110(3):275-80.
Golwyn, Daniel H. et al, Percutaneous Transcatheter Renal Ablation with Absolute Ethanol for Uncontrolled Hypertension or Nephrotic Syndrome: Results in 11 Patients with End-Stage Renal Disease, Journal of Vascular and Interventional Radiology, Jul.-Aug. 1997, vol. 8, No. 4, 527-533.
Gorisch, Wolfram et al, Heat-Induced Contraction of Blood Vessels, Lasers in Surgery and Medicine 2:I-13 (1982).
Grassi, Guido et al, Baroreflex Control of Sympathetic Nerve Activity in Essential and Secondary Hypertension, Hypertension Journal of The American Heart Association, 1998;31:68-72.
Grassi, Guido et al, Dissociation Between Muscle and Skin Sympathetic Nerve Activity in Essential Hypertension, Obesity, and Congestive Heart Failure, Hypertension. 1998;31:64-67.
Grimson, Keith S. et al, Results of Treatment of Patients with Hypertension by Total Thoracic and Partial to Total Lumbar Sympathectomy, Splanchnicectomy and Celiac Ganglionectomy, Annals of Surgery, Jun. 1949, vol. 129, No. 6, 850-871.
Grimson, Keith S. et al, Total Thoracic and Partial to Total Lumbar Sympathectomy, Splanchnicectomy and Celiac Ganglionectomy for Hypertension, Annals of Surgery, Oct. 1953, vol. 138, No. 4, 532-547.
Grimson, Keith S., Total Thoracic and Partial to Total Lumbar Sympathectomy and Celiac Ganglionectomy in the Treatment of Hypertension, Annals of Surgery, Oct. 1941, vol. 114, No. 4, 753-775.
Guyton, Arthur C., Blood Pressure Control Special Role of the Kidneys and Body Fluids, Science, vol. 252, Jun. 1991, 1813-1816.
Hafkenschiel, Joseph H. et al, Primary Hypertension Survey of the Survival of Patients with Established Diastolic Hypertension After Ten Years of Medical and Surgical Treatment, The American Journal of Cardiology, vol. 16, Jul. 1965, 61-66.
Hafkenschiel, Joseph H. et al, The Surgical Treatment of Hypertension with Particular Reference to Andrenalectomy and Sympathectomy, Transactions. American College of Cardiology, vol. 5, Dec. 1955, pp. 107-112.
Hall, J.E. et al, Role of Sympathetic Nervous System and Neuropeptides in Obesity Hypertension, Brazilian Journal of Medical and Biological Research, 2000, 33:605-618.
Hall, John E., The Kidney, Hypertension, and Obesity, Hypertension. 2003;41:625-633.
Hall, Winthrop H. et al, Combined Embolization and Percutaneous Radiofrequency Ablation of a Solid Renal Tumor, American Journal of Roentgenology, 174, Jun. 2000, 1592-1594.
Hamm, Christian et al, Confluence, Issue eight, Apr. 2014.
Han, Young-Min et al, Renal Artery Embolization with Diluted Hot Contrast Medium: An Experimental Study, Journal of Vascular and Interventional Radiology, Jul. 2001;12(7):862-868.
Hansen, Jesper Melchoir et al, The Transplanted Human Kidney Does Not Achieve Functional Reinnervation, Clinical Science, (1994) 87, 13-20.
Heuer, George J., The Surgical Treatment of Essential Hypertension, Annals of Surgery, Oct. 1936, vol. 104, No. 3, 771-786.
Hinton, J. William, End Results of Thoracolumbar Sympathectomy for Advanced Essential Hypertension, The Bulletin, Apr. 1948, 239-252.
Holmer, Stephan et al, Role of Renal Nerves for the Expression of Renin in Adult Rat Kidney, The American Journal of Physiology, May 1994;266(5 Pt 2):F738-F745.
Hoobler, S.W. et al, The Effects of Splanchnicectomy on the Blood Pressure in Hypertension, Circulation Journal of The American Heart Association, vol. IV, Aug. 1951, 173-183.
Hoppe, Uta C. et al, Minimally Invasive System for Baroreflex Activation Therapy Chronically Lowers Blood Pressure with Pacemaker-like Safety Profile: Results from the Barostim Neo Ttrial, J Am Soc Hypertens. Jul.-Aug. 2012;6 (4):270-6.
Howard, James P. et al, Size of Blood Pressure Reduction from Renal Denervation: Insights from Meta-Analysis of Antihypertensive Drug Trials of 4121 Patients with Focus on Trial Design: the Converge Report, Heart, Sep. 15, 2013; 0:1-9.
Howard, James P. et al, Unintentional Overestimation of an Expected Antihypertensive Effect in Drug and Device Trials: Mechanisms and Solutions, International Journal of Cardiology, vol. 172, Issue 1, Mar. 1, 2014, pp. 29-35.
Howell, Marcus H. et al, Tandem Stenting of Crossed Renal Arteries with Ostial Stenosis, Tex Heart Inst J. 2000; 27(2): 166-169.
Hoye, Neil A. et al, Endovascular Renal Denervation: A Novel Sympatholytic with Relevance to Chronic Kidney Disease, Clinical Kidney Journal Advance Access, Nov. 8, 2013; 0: 1-8.
Huang, Shoei K. Stephen et al, Radiofrequency Catheter Ablation of Cardiac Arrhythmias, Basic Concepts and Clinical Applications, Wiley-Blackwell, Jun. 2000, 1-12.
Huang, Wann-Chu, Renal Denervation Prevents and Reverses Hyperinsulinemia-Induced Hypertension in Rats, Hypertension Journal of The American Heart Association, 1998;32:249-254.
Humpreys, Michael H., Renal Nerves and CKD: Is Renal Denervation the Answer?, Journal of The American Socity of Nephrology, 2012, 23: 1-3.
Intemational Search Report and Written Opinion for Application No. PCT/US2010/054637 mailed Jan. 3, 2011.
International Search Report and Written Opinion for Application No. PCT/US2010/054684 mailed Jan. 10, 2011.
Irigoyen, M.C.C. et al, Baroreflex Control of Sympathetic Activity in Experimental Hypertension, Brazilian Journal of Medical and Biological Research, (1998) 31: 1213-1220.
Izzo, Jr, Joseph L. et al, The Sympathetic Nervous System and Baroreflexes in Hypertension and Hypotension, Current Hypertension Reports 1999, 3:254-263.
Jackman, Warren M. et al, Catheter Ablation of Arrhythmias, Proposed Anatomy and Catheter Ablation of Epicardial Posteroseptal and Left Posterior Accessory AV Pathways (Chapter 16), 2002, Futura Publishing Company, Inc., 321-343.
Abboud, Francois M., The Sympathetic System in Hypertension, State-of-the-Art Review, Hypertension Journal of the American Heart Association, Hypertension 4 (suppl II): II-208-II-225, 1982.
Allen, Edgar V., Sympathectomy for Essential Hypertension, Circulation Journal of the American Heart Association, vol. VI, Jul. 1952, 131-140.
Anderson, Erling A. et al, Elevated Sympathetic Nerve Activity in Borderline Hypertensive Humans, Evidence From Direct Intraneural Recordings, Hypertension Journal of the American Heart Association, vol. 14, No. 2, Aug. 1989, 177-183.
Ardian, Inc., Ardian(R) Receives 2010 EuroPCR Innovation Award and Demonstrates Further Durability of Renal Denervation Treatment for Hypertension, PR Newswire, Jun. 3, 2010.
Arentz, Thomas et al, Feasibility and Safety of Pulmonary Vein Isolation Using a New Mapping and Navigation System in Patients with Refractory Atrial Fibrillation, Circulation Journal of the American Heart Association, Nov. 18, 2003, 2484-2490.
Badoer, Emilio et al, Cardiac Afferents Play the Dominant Role in Renal Nerve Inhibition Elicited by Volume Expansion in the Rabbit, American Journal of Physiology, 1998, R383-R388.
Bakris, George L. et al, Baroreflex Activation Therapy Provides Durable Benefit in Patients with Resistant Hypertension: Results of Long-Term Follow-up in the Rheos Pivotal Trial, J Am Soc Hypertens. Mar.-Apr. 2012;6 (2):152-8.
Bao, Gang et al, Blood Pressure Response to Chronic Episodic Hypoxia: Role of the Sympathetic Nervous System, American Journal of Physiology, 1997, 95-101.
Barajas, Luciano et al, Anatomy of the Renal Innervation: Intrarenal Aspects and Ganglia of Origin, Canadian Journal of Physiology and Pharmacology, vol. 70, No. 5, May 1992, 735-749.
Barajas, Luciano et al, Monoaminergic Innervation of the Rat Kidney: A Quantitative Study, American Journal of Physiology, vol. 259, No. 3, Sep. 1990, F503-F511.
Bardram, Linda et al, Late Results After Surgical Treatment of Renovascular Hypertension, A Follow-up Study of 122 Patients 2-18 Years After Surgery, Annals of Surgery, vol. 201, No. 2, Feb. 1985, 219-224.
Bello-Reuss, Elsa et al, Effect of Renal Sympathetic Nerve Stimulation on Proximal Water and Sodium Reabsorption, The Journal of Clinical Investigation, vol. 57, Apr. 1976, 1104-1107.
Bello-Reuss, Elsa et al, Effects of Acute Unilateral Renal Denervation in the Rat, The Journal of Clinical Investigation, vol. 56, Jul. 1975, 208-217.
Benito, Fernando et al, Radiofrequency Catheter Ablation of Accessory Pathways in Infants, Heart, 1997, 78, 160-162.

Bernardi, Luciano et al, Influence of Type of Surgery on the Occurrence of Parasympathetic Reinnervation After Cardiac Transplantation, Circulation Journal of The American Heart Association, Apr. 14, 1998;97(14):1368-74.
Bertog, Stefan C. et al, Renal Denervation for Hypertension, JACC: Cardiovascular Interventions, vol. 5, No. 3, Mar. 2012, 249-258.
Bertram, Harald et al, Coronary Artery Stenosis After Radiofrequency Catheter Ablation of Accessory Atrioventricular Pathways in Children with Ebstein's Malformation, Circulation Journal of the American Heart Association, 2001, 538-543.
Blankestijn, Peter J. et al, Renal Denervation: Potential Impact on Hypertension in Kidney Disease?, Nephrol Dial Transplant (2011) 0: 1-3.
Blankestijn, Peter J. et al, Sympathetic Overactivity in Renal Failure Controlled by ACE Inhibition: Clinical Significance, Nephrol Dial Transplant, 2000, 15, 755-758.
Blum, Ulrich et al, Treatment of Ostial Renal-Artery Stenoses with Vascular Endoprostheses After Unsuccessful Balloon Angioplasty, The New England Journal of Medicine, vol. 336, No. 7, Feb. 1997, 459-465.
Brinkmann, Julia et al, Catheter-Based Renal Nerve Ablation and Centrally Generated Sympathetic Activity in Difficult-to-Control Hypertensive Patients Prospective Case Series, Hypertension. 2012;60:1485-1490.
Brookes, Linda et al, Renal Denervation: Is Reality Meeting Expectations?, An Interview with Michel Azizi, MD, PhD, Medscape, Jan. 7, 2013.
Bunte, Matthew C. et al, Endovascular Treatment of Resistant and Uncontrolled Hypertension, JACC: Cardiovascular Interventions, vol. 6, No. 1, Jan. 2013, 1-9.
Calleary, Hickey D. et al, Pre-Transplant Bilateral Native Nephrectomy for Medically Refractory Hypertension, The Irish Medical Journal, Jul.-Aug. 2001;94(7):214-6.
Callens, David J. et al, Narrowing of the Superior Vena Cava-Right Atrium Junction During Radiofrequency Catheter Ablation for Inappropriate Sinus Tachycardia: Analysis with Intracardiac Echocardiography, Journal of the American College of Cardiology, vol. 33, No. 6, 1999, 1667-1670.
Campese, V.M., Is Hypertension in Chronic Renal Failure Neurogenic in Nature?, Nephrol Dial Transplant, 1994, 9: 741-742.
Campese, Vito M. et al, Neurogenic Factors in Renal Hypertension, Current Hypertension Reports, 2002 4: 256-260.
Campese, Vito M. et al, Renal Afferent Denervation Prevents Hypertension in Rats With Chronic Renal Failure, Hypertension, 1995, 25, 878-882.
Campese, Vito M. et al, Renal Afferent Denervation Prevents the Progression of Renal Disease in the Renal Ablation Model of Chronic Renal Failure in Rat, American Journal of Kidney Disease, vol. 26, No. 5, Nov. 1995, 361-865.
Campese, Vito M., Interventional Hypertension: A New Hope or a New Hype? The Need to Redefine Resistant Hypertension, J Hypertens. Nov. 2013; 31(11):2118-21.
Canadian Agency for Drugs and Technologies in Health, Catheter-Based Renal Denervation for Treatment-Resistant Hypertension; Issues in Emerging Health Technologies, Issue 121, Mar. 2013.
Carlstedt, Thomas et al, Regrowth of Lesioned Dorsal Root Nerve Fibers into the Spinal Cord of Neonatal Rats, Neuroscience Letters Feb. 10, 1987;74(1):14-8.
Chabanier, H. et al, On the Decapsulation and Neurectomy of the Kidnesy in Permanent Hypertensive States, The Medical Press, Feb. 22, 1936, No. 16, 307-310.
Ciccone, C D et al, Effects of Acute Renal Denervation on Kidney Function in Deoxycorticosterone Acetate-Hypertensive Swine, Hypertension Journal of the American Heart Association, Oct. 1986, vol. 8, No. 10, 925-931.
Ciriello, John et al, Renal Afferents and Hypertension, Current Hypertension Reports 2002, 4:136-142.
Converse, Richard L. et al, Sympathetic Overactivity in Patients with Chronic Renal Failure, The New England Journal of Medicine, vol. 327, No. 27, 1992, 1912-1918.
Crile, George, The Clinical Results of Celiac Ganglionectomy in the Treatment of Essential Hypertension, Annals of Surgery, Jun. 1938; 107(6): 909-916.
Cruickshank, J.M., Beta-Blockers Continue to Surprise Us, European Heart Journal (2000) 21, 354-364.
Curtis, John J. et al, Surgical Therapy for Persistent Hypertension After Renal Transplantation, Transplantation, vol. 31, No. 2, 1981, 125-128.
Dailey, U.G., Surgical Treatment of Hypertension: A Review-Part II, Journal of the National Medical Association, May 1948, vol. 40, No. 3, 113-116.
Dailey, U.G., Surgical Treatment of Hypertension: A Review-Part III, Journal of the National Medical Association, Jul. 1948, vol. 40, No. 4, 160-162.
Dailey, U.G., The Surgical Treatment of Hypertension: A Review, Journal of the National Medical Association, Mar. 1948, vol. 40, No. 2, 76-79.
Davis, Mark I. et al, Effectiveness of Renal Denervation Therapy for Resistant Hypertension A Systematic Review and Meta-Analysis, Journal of the American College of Cardiology, vol. 62, No. 3, Jul. 16, 2013, 231-241.
De Wardener, H.E., The Hypothalamus and Hypertension, Physiological Reviews,vol. 81, No. 4, Oct. 2001.
Dequattro V. et al, The Sympathetic Nervous System: The Muse of Primary Hypertension, Journal of Human Hypertension, 2002, 16 (Suppl 1), S64-S69.
Dibona, Gerald F. et al, Neural Control of Renal Function, Physiological Reviews, vol. 77, No. 1, Jan. 1997, 75-197.
Dibona, Gerald F. et al, Translational Medicine: The Antihypertensive Effect of Renal Denervation, Americal Journal of Physiology, 2010, 298, R245-R253.
Dibona, Gerald F., Neural Control of Renal Function: Cardiovascular Implications, Hypertension Journal of the American Heart Association, vol. 13, No. 6, Part 1, Jun. 1989, 539-548.
Dibona, Gerald F., Neural Control of the Kidney: Functionally Specific Renal Sympathetic Nerve Fibers, American Journal of Physiology, 2000, 279, R1517-R1524.
Dibona, Gerald F., Neural Control of the Kidney: Past, Present, and Future, Hypertension Journal of The American Heart Association, vol. 41, Mar. 2003, Part II, 621-624.
Zazgornik, Jan et al, Bilateral Nephrectomy: The Best, but Often Overlooked, Treatment for Refractory Hypertension in Hemodialysis Patients, AJH 1998; 11:1364-1370.
Robbins, Ivan M. et al, Pulmonary Vein Stenosis After Catheter Ablation of Atrial Fibrillation, Circulation Journal of The American Heart Association, 1998;98:1769-1775.
Rocha-Singh, Krishna J., Catheter-Based Sympathetic Renal Denervation A Novel Strategy for the Treatment of Resistant Hypertension, Endovascular Today, Aug. 2009, 52-56.
Rocha-Singh, Krishna J., Renal Artery Denervation: A Brave New Frontier, Endovascular Today, Feb. 2012, 45-53.
Sanderson, John E. et al, Effect of B-Blockade on Baroreceptor and Autonomic Function in Heart Failure, Clinical Science (1999) 96, 137-146.
Santos, Mario et al, Renal Sympathetic Denervation in Resistant Hypertension, World J Cardiol Apr. 26, 2013; 5(4): 94-101.
Savard, Sebastien et al, Eligibility for Renal Denervation in Patients With Resistant Hypertension When Enthusiasm Meets Reality in Real-Life Patients, J Am Coll Cardiol. 2012;60(23):2422-2424.
Schauerte, Patrick et al, Catheter Ablation of Cardiac Autonomic Nerves for Prevention of Vagal Atrial Fibrillation, Circulation Journal of The American Heart Association, 2000, 102:2774-2780.
Schlaich, Markus P. et al, International Expert Consensus Statement: Percutaneous Transluminal Renal Denervation for the Treatment of Resistant Hypertension, Journal of the American College of Cardiology vol. 62, Issue 22, Dec. 3, 2013, pp. 2031-2045.
Schlaich, Markus P. et al, Renal Denervation as a Therapeutic Approach for Hypertension Novel Implications for an Old Concept, Hypertension Journal of The American Heart Association, 2009;54:1195-1201.
Schlaich, Markus P. et al, Renal Sympathetic-Nerve Ablation for Uncontrolled Hypertension, The New England Journal of Medicine, 2009; 361:932-934.
Schmieder, Roland E. et al, ESH Position Paper: Renal Denervation—An Iterventional Therapy of Resistant Hypertension, Journal of Hypertension, 2012, 30:837-841.
Schmieder, Roland E. et al, Updated EHS Position Paper on Interventional Therapy of Resistant Hypertension, EuroIntervention, May 2013; 9:R58-R66.
Sellers, Alfred M. et al, Adrenalectomy and Sympathectomy for Hypertension Ten Year Survival, Archives of Surgery, vol. 89, Nov. 1964, 880-886.

Sen, S.K., Some Observations on Decapsulation and Denervation of the Kidney, The British Journal of Urology, vol. 8, Issue 4, Dec. 1936, 319-328.
Shiraki, Iwao William, Correction of Renal Hypertension by Ligation of Stenotic Segmental Renal Artery, Urology, vol. IX, No. 3, Mar. 1977, 296-298.
Shonai, Takaharu et al, Renal Artery Aneurysm: Evaluation with Color Doppler Ultrasonography Before and After Percutaneous Transarterial Embolization, J Ultrasound Med 19:277-280, 2000.
Silver, Donald et al, Renovascular Hypertension From Renal Artery Compression by Congenital Bands, Annals of Surgery, Feb. 1976, 161-166.
Smith, Gardner W. et al, Surgical Results and the Diagnostic Evaluation of Renovascular Hypertension, Annals of Surgery, May 1968, 669-680.
Smith, Harold R et al, Radiofrequency Neurolysis in a Clinical Model Neuropathological Correlation, J Neurosurg 55:246-253, 1981.
Smithwick, R.N., An Evaluation of the Surgical Treatment of Hypertension, The Bulletin, Nov. 1949; 25(11):698-716.
Smithwick, Reginald H. et al, Splanchnicectomy for Essential Hypertension, The Journal of the American Medical Association, vol. 152, No. 16, Aug. 1953, 1501-1504.
Solis-Herruzo, J.A. et al, Effects of Lumbar Sympathetic Block on Kidney Function in Cirrhotic Patients with Hepatorenal Syndrome, Journal of Hepatology, 1987; 5: 167-173.
Sowers, James R. et al, Diabetes, Hypertension, and Cardiovascular Disease: An Update, Hypertension Journal of The American Heart Association, 2001;37:1053-1059.
Stanley, James C., Surgical Treatment of Renovascular Hypertension, The American Journal of Surgery, vol. 174, Aug. 1997, 102-110.
Stella, Andrea et al, Effects of Reversible Renal Denervation on Haemodynamic and Excretory Functions of the Ipsilateral and Contralateral Kidney in the Cat, Journal of Hypertension 1986, 4: 181-188.
Stuart, Candace, Newest Frontier in Cardiac Care: Kidneys; Cardiovascular Business, Dec. 13, 2012.
Stuart, Mary, Masterminds of Ardian: An Interview With Inventors Mark Gelfand and Howard Levin, Windhover Information, Start-Up Jan. 1, 2011.
Sun, Yingxian et al, Risk of Coronary Stenosis with Venous Ablation for Epicardial Accessory Pathways, PACE, Apr. 2001, Part II, vol. 24, 605.
Swartz, John F. et al, Radiofrequency Endocardial Catheter Ablation of Accessory Atrioventricular Pathway Atrial Insertion Sites, Circulation Journal of The American Heart Association, 1993;87:487-499.
Teigen, Corey L. et al, Segmental Renal Artery Embolization for Treatment of Pediatric Renovascular Hypertension, Journal of Vascular and Interventional Radiology, 1992; 3:111-117.
Teixeira, Maria Do Carmo et al,1992; Role of the Peripheral Renin Profile in Predicting Blood Pressure Control After Bilateral Nephrectomy in Renal-Transplanted Patients, Nephrol Dial Transplant (1998) 13: 2092-2097.
Teo, W S et al, Radiofrequency Catheter Ablation of Accessory Pathways: The Initial Experience in Singapore, Singapore Medical Journal, 1994; vol. 35:36-40.
Thiebot, J. et al, Bilateral Nephrectomy by Embolization of the Renal Arteries: A Report on Five Cases (author's transl), Sem Hop. Apr. 8-15, 1980;56(13-14):670-5.
Thomas, George et al, Renal Denervation to Treat Resistant Hypertension: Guarded Optimism, Cleveland Clinic Journal of Medicine, vol. 79, No. 7, Jul. 2012, 501-510.
Thomas, Natalie A., Secondary Consideration in Nonobviousness Analysis: The Use of Objective Indicia Following KSR V. Teleflex, NYU Law Review, vol. 86, No. 6, Dec. 2011, 2070-2112.
Ting, Chih-Tai et al, Arterial Hemodynamics in Human Hypertension Effects of Angiotensin Converting Enzyme Inhibition, Hypertension Journal of The American Heart Association, 1993;22:839-846.
Uchida, Fumiya et al, Effect of Radiofrequency Catheter Ablation on Parasympathetic Denervation: A Comparison of Three Different Ablation Sites, PACE, vol. 21, Nov. 1998, Part II, 2517-2521.
Valente, John F. et al, Laparoscopic Renal Denervation for Intractable ADPKD-Related Pain, Nephrol Dial Transplant (2001) 16:160.
Villarreal, Daniel et al, Effects of Renal Denervation on Postprandial Sodium Excretion in Experimental Heart Failure, American Journal of Physiology, May 1994;266(5 Pt 2):R1599-R1604.
Vonend, Oliver et al, Secondary Rise in Blood Pressure After Renal Denervation, The Lancet, vol. 380, Issue A143, p. 778, Aug. 25, 2012.
Vujaskovic, Z. et al, Effects of Intraoperative Hyperthermia on Canine Sciatic Nerve: Histopathologic and Morphometric Studies, Int. J. Hyperthermia, 1994, vol. 10, No. 6, 845-855.
Webb, R.L. et al, Functional Identification of the Central Projections of Afferent Renal Nerves, Clin. and Exper.-Theory and Practice, Ag(Suppl.I), 47-57 (1987).
Weinstock, Marta et al, Renal Denervation Prevents Sodium Retention and Hypertension in Salt-Sensitive Rabbits with Genetic Baroreflex Impairment, Clinical Science (1996) 90, 287-293.
Wilcox, Josiah N., Scientific Basis Behind Renal Denervation for the Control of Hypertension, Medtronic, Inc., Dec. 2012, 38 pages.
Winternitz, Sherry R. et al, Role of the Renal Sympathetic Nerves in the Development and Maintenance of Hypertension in the Spontaneously Hypertensive Rat, Journal of Clinical Investigation, vol. 66 Nov. 1980, 971-978.
Wolf-Maier, Katharina et al, Hypertension Treatment and Control in Five European Countries, Canada, and the United States, Hypertension. 2004;43:10-17.
Worthley, Stephen G. et al, Renal Denervation: How Do You Measure Success?, presentation 28 pages; Jul. 30, 2013.
Wyss, J.M. et al, Sensory Denervation of the Kidney Attenuates Renovascular Hypertension in the Rat, Am J Physiol Heart Circ Physiol 250:H82-H86, 1986.
Yamada, Yutaka et al, Age-Related Changes in Muscle Sympathetic Nerve Activity in Essential Hypertension, Hypertension Journal of The American Heart Association, 1989;13:870-877.
Young, Robert R. et al, Reversible Block of Nerve Conduction by Ultrasound Ultrasonic Blocking of Nerve Fibers, Arch Neurol. 1961;4(1):83-89.

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(57) **CLAIM**

The ornamental design for an ablation generator, as shown and described.

DESCRIPTION

FIG. **1** is a perspective view of an ablation generator of our new design.
FIG. **2** is a front elevation thereof.
FIG. **3** is a rear elevation thereof.
FIG. **4** is a right side elevation thereof.
FIG. **5** is a left side elevation thereof.
FIG. **6** is a top plan view thereof; and,
FIG. **7** is a bottom plan view thereof.
The broken lines in the drawings are for illustration purposes only and do not form a part of the claimed design.

1 Claim, 7 Drawing Sheets

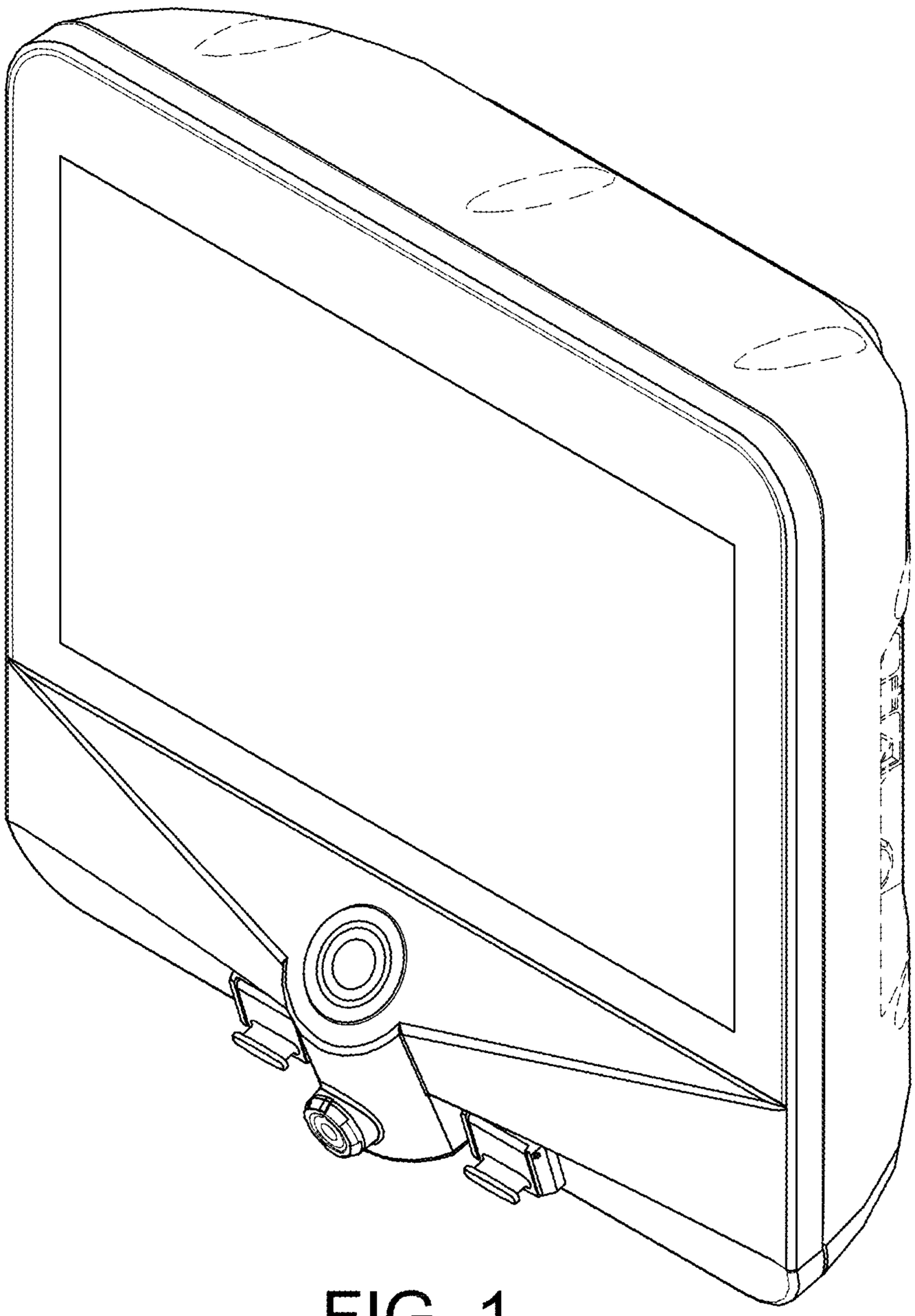

FIG. 1

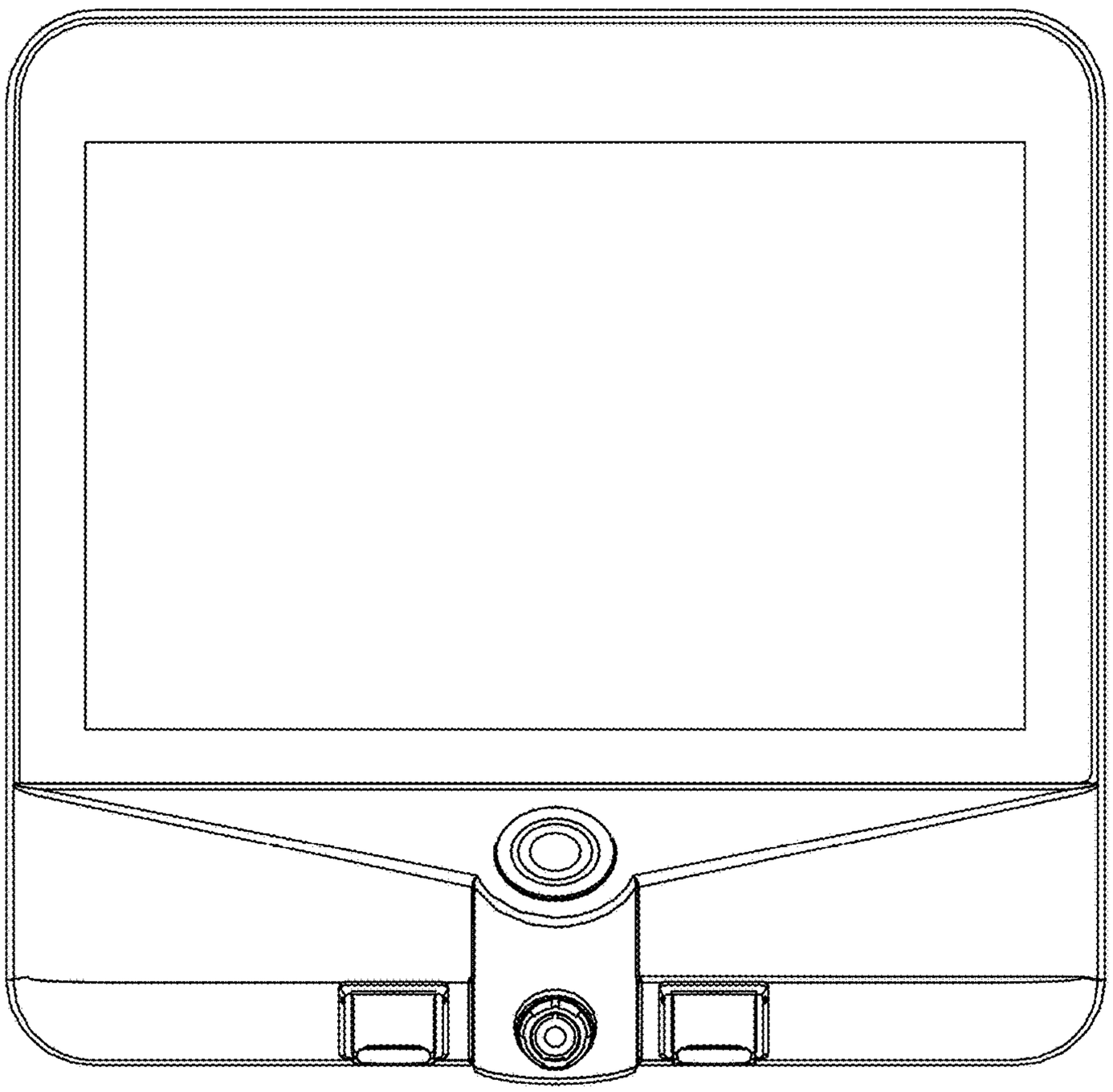

FIG. 2

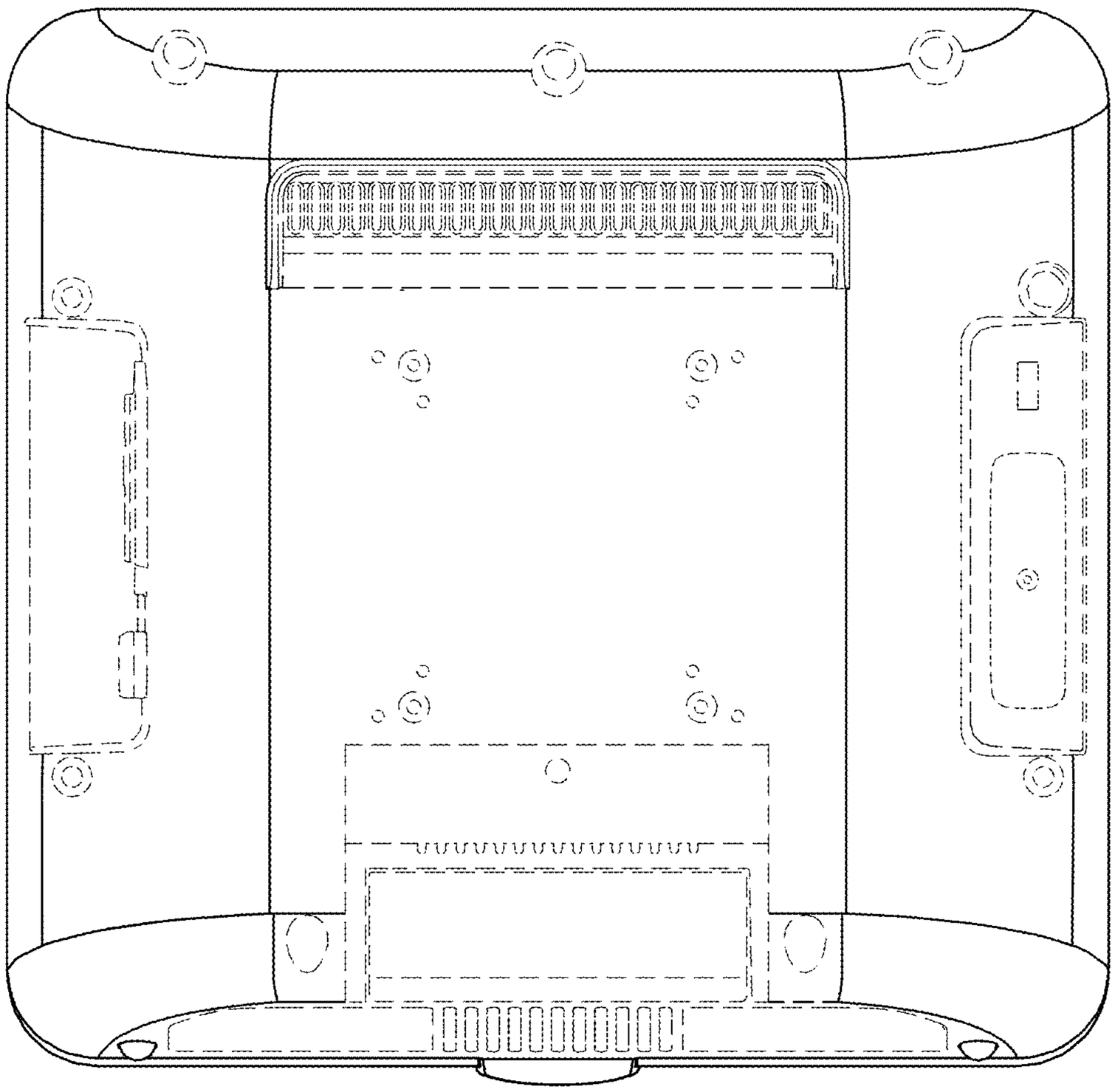

FIG. 3

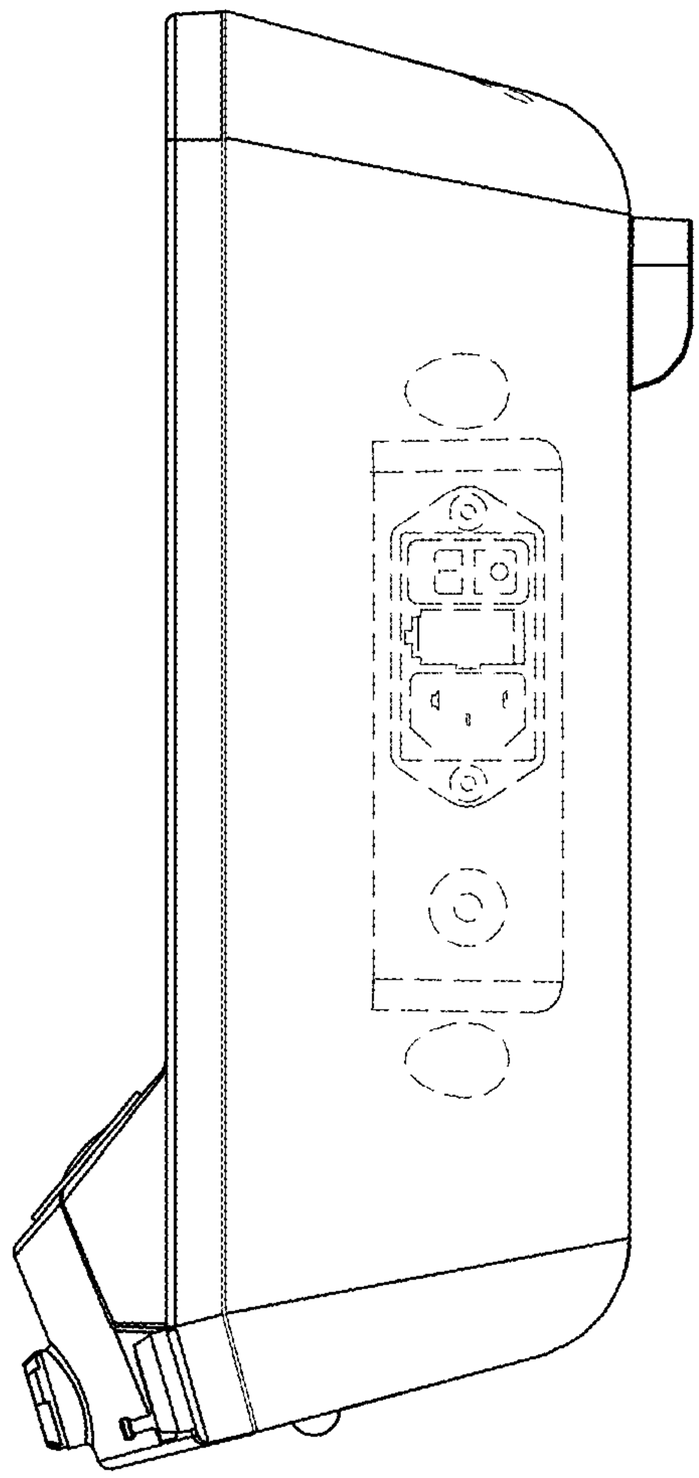

FIG. 4

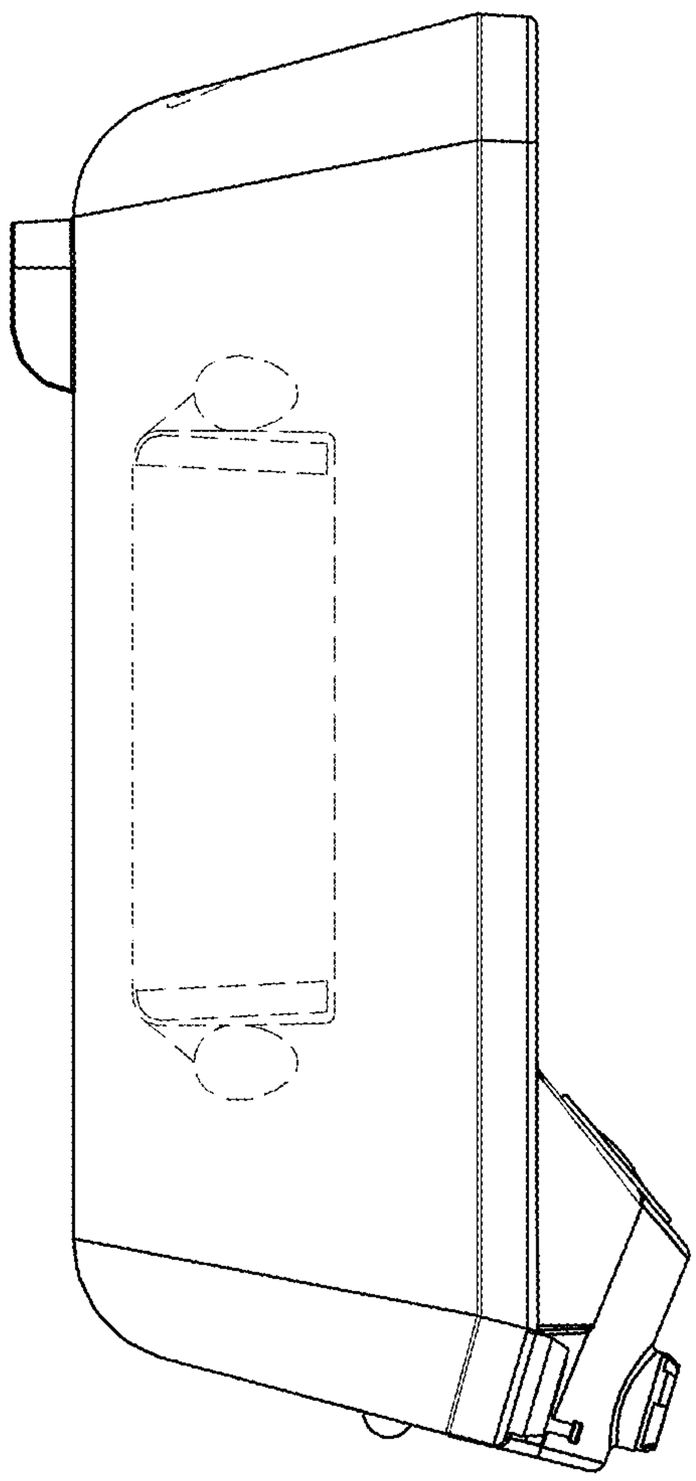

FIG. 5

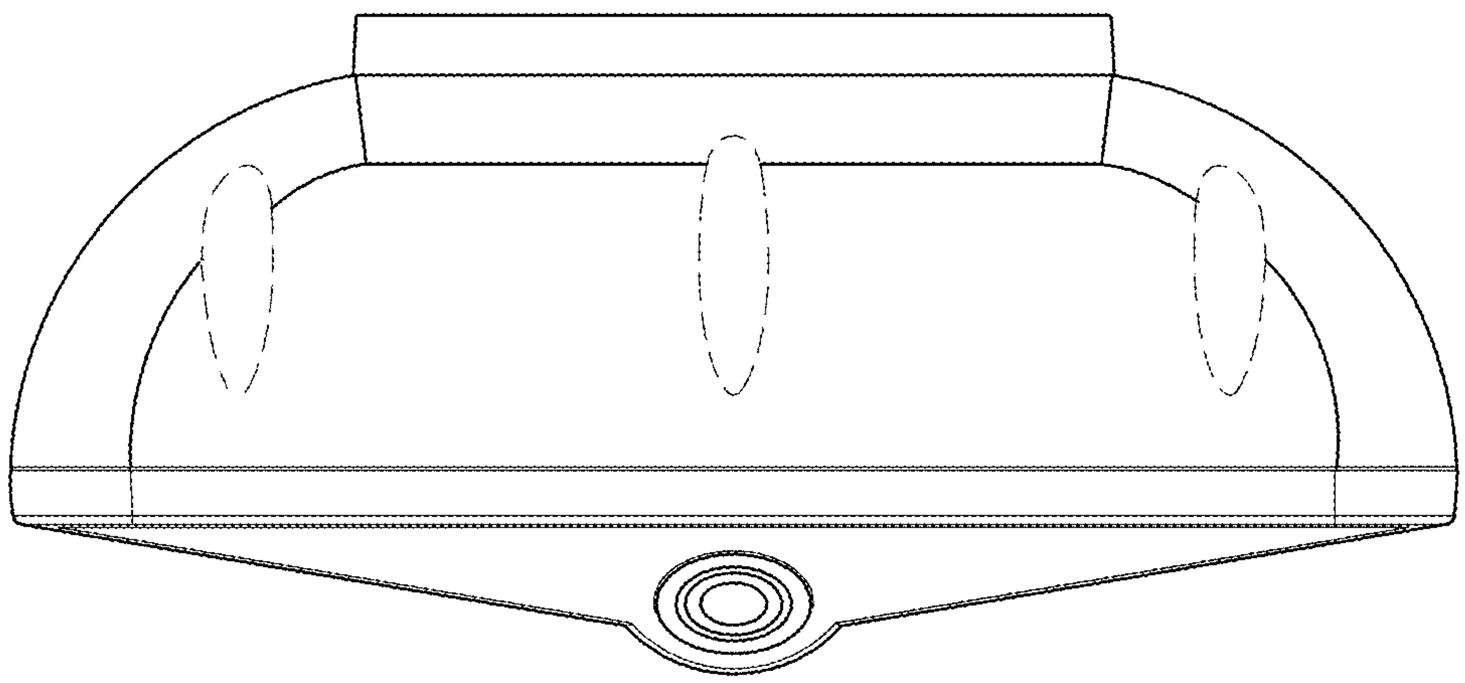

FIG. 6

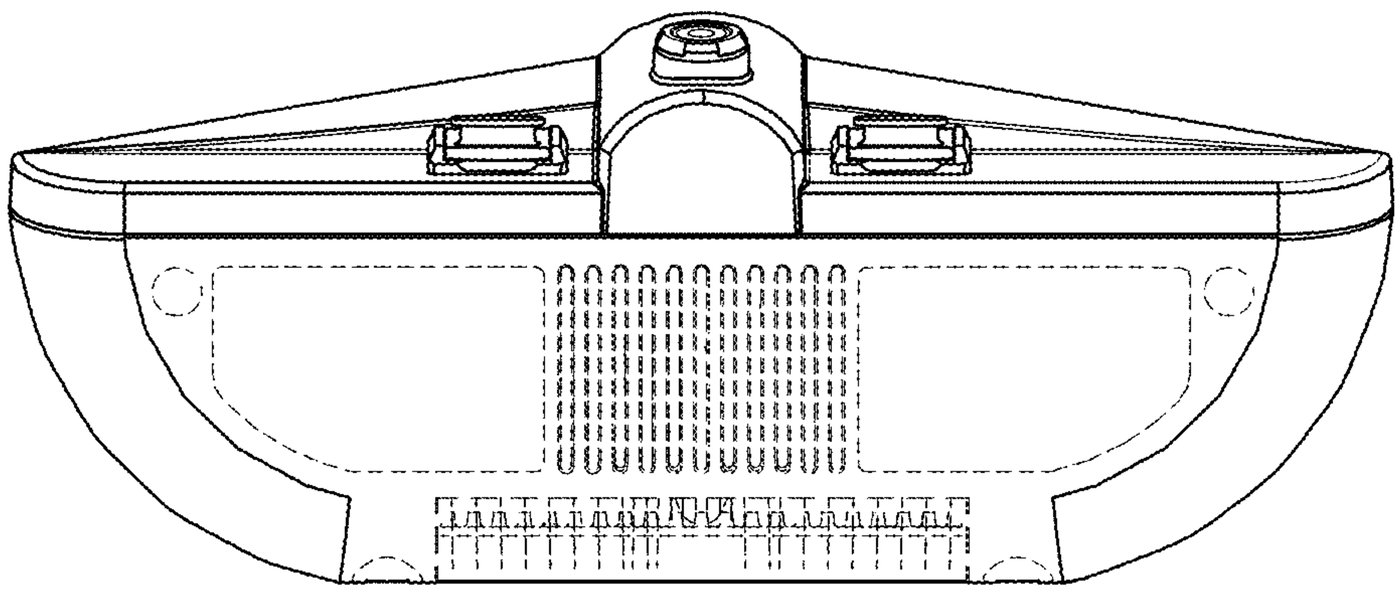

FIG. 7