

03-04-1999

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TO: The Commissioner of Patents and T

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☐ Resubmission (Non-Recordation)  
Document ID#   
☐ Correction of PTO Error  
Reel #  Frame #   
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Reel #  Frame #

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Execution Date  
Month Day Year  
02021999

Name (line 1) InControl, Inc.

Name (line 2)

**Second Party**

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

**Receiving Party**

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☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1) Cardiac Pacemakers, Inc.

Name (line 2)

Address (line 1) 4100 Hamline Avenue North

Address (line 2)

Address (line 3) St. Paul

Minnesota

55112

City

State/Country

Zip Code

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

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3120.00 DP

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**PATENT**  
**REEL: 9781 FRAME: 0901**

**Correspondent Name and Address**Area Code and Telephone Number **312/755-2580**Name **Malcolm McCaleb, Jr./Darlene L. Gentry**Address (line 1) **Foley & Lardner**Address (line 2) **330 North Wabash Avenue, Suite 3300**Address (line 3) **One IBM Plaza**Address (line 4) **Chicago, Illinois 60611****Pages**Enter the total number of pages of the attached correspondence document including any attachments. # **7****Application Number(s) or Patent Number(s)**Enter either the Patent Application Number or the Patent Number. **DO NOT ENTER BOTH numbers for the same property.****Patent Application Number(s)****08970879****09034542****09060544****09060723****08984588****09099045****09102844****09102855****09130385****Patent Number(s)****5158079****5135004****5282837****5313953****5433729****5251624****5304218****5348021****5342408**If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

**Patent Cooperation Treaty (PCT)**Enter PCT application number  
only if a U.S. Application Number  
has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

**Number of Properties**Enter the total number of properties involved. # **78****Fee Amount**Fee Amount for Properties Listed (37 CFR 3.41): \$ **3120.00**Method of Payment:  
**Deposit Account**Enclosed ☒Deposit Account ☐

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

# **06-1450**

Authorization to charge additional fees:

Yes ☒No ☐**Statement and Signature***To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.***Malcolm McCaleb, Jr.**

Name of Person Signing

Signature

Date

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

U.S. Department of Commerce  
Patent and Trademark Office  
PATENT

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) InControl, Inc.

Execution Date  
Month Day Year

02021999

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

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Name (line 2)

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Enter additional Receiving Party(ies)

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Application Number(s) or Patent Number(s)

☒ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

09148094

09146948

09108902

09103218

09108898

Patent Number(s)

5207219

5269298

5282836

5265600

5267559

5304139

5279291

5332400

5395373

5464432

5350402

5312444

5388578

5411031

5522852

**Assignment from InControl, Inc. to Cardiac Pacemakers, Inc.**

**Additional Patent Numbers**

5405375	5531781	5350404
5387233	5522850	5549641
5458621	5464433	5527345
5486198	5584864	5486199
5330496	5403354	5476498
5490862	5509925	5554175
5507780	5441519	5531768
5464431	5562709	5628774
5620467	5662691	5578063
RE35779	5813999	5674250
5674249	5697954	5766224
5645569	5683403	5674253
5676687	5676153	5814081
5785059		

**ASSIGNMENT OF PATENT RIGHTS**

**WHEREAS**, InControl, Inc., A Corporation of Delaware, 6675 – 185th Avenue NE, Redmond, Washington 98052-6734, USA (“Assignor”), is the owner of the patents and patent applications set forth on the attached Schedule.

**WHEREAS**, Cardiac Pacemakers, Inc., A Corporation of Delaware, 4100 Hamline Avenue, St. Paul, Minnesota 55112, USA (“Assignee”) is desirous of acquiring the patents and patent applications set forth in the attached Schedule.

**NOW THEREFORE**, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR by these presents does sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right to the patents and patent applications as described the attached Schedule, in the United States and all foreign countries, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States adheres, and hereby authorize and requests the Commissioner of Patents to issue said Letters Patents to ASSIGNEE, for the sole use and benefit of ASSIGNEE, its successors, assigns and legal representatives.

**AND HEREBY ASSIGNOR AGREES** to transfer a like interest upon request of ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements and applications for patents based thereon, growing out of or relating to the inventions; and to provide all reasonable assistance and execute any

papers deemed essential by ASSIGNEE, its successors, assigns and legal representatives, to ASSIGNEE's full protection and title in and to the inventions hereby transferred.

**AGREEING, FURTHERMORE**, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

**EXECUTED** this 2<sup>nd</sup> day of February 1999.

**InControl, Inc.**



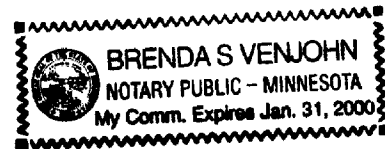
Name: Ralph F. Hall

Title: Secretary

State of Minnesota )  
 ) SS  
County of Ramsey )

On this 16 day of February before me appeared Ralph F. Hall, known to me personally and in the capacity in which he has signed, and after executing this document acknowledged and affirmed that he did so freely, and in the capacity indicated, and that he has the power and authority to do so in that capacity and on behalf of that entity.

Brenda S. Venjohn  
Notary Public



**SCHEDULE**

<b>Title</b>	<b>Appln. No.</b>	<b>Appln. Date</b>	<b>Patent No.</b>	<b>Issue Date</b>
Implantable Device for Preventing Tachyarrhythmias	07/660541	2/25/91	5158079	10/27/92
Implantable Myocardial Ischemia Monitor and Related Method	07/667819	3/12/91	5135004	8/4/92
Atrial Defibrillator and Method	07/685130	4/12/91	5282837	2/1/94
Implantable Cardiac Patient Monitor	07/820580	1/14/92	5313953	5/24/94
Improved Atrial Defibrillator, Lead Systems, and Method	07/856514	3/24/92	5433729	7/18/95
Pulse Generator for Use in an Implantable Atrial Defibrillator	07/902998	6/22/92	5251624	10/12/93
Cardiac Lead Implanting Arrangement and Method	07/892177	6/2/92	5304218	4/19/94
Apparatus and Method for Reliably Detecting a Depolarization Activation Wave of the Heart and Atrial Defibrillator	07/861184	3/31/92	5348021	9/20/94
Telemetry System for an Implantable Cardiac Device	08/001330	1/7/93	5342408	8/30/94
Atrial Defibrillator and Method for Providing Interval Timing Prior to Cardioversion	07/965195	10/23/92	5207219	5/4/93
Atrial Defibrillator and Method for Providing Synchronized Delayed Cardioversion	07/965168	10/23/92	5269298	12/14/93
Atrial Defibrillator and Method for Providing Pre-Cardioversion Pacing	07/965167	10/23/92	5282836	2/1/94
Atrial Defibrillator and Method for Providing Post-Cardioversion Pacing	07/965156	10/23/92	5265600	11/30/93
Atrial Defibrillator and Method for Providing Atrial Sensing	07/965166	10/23/92	5267559	12/7/93
Improved Lead Configuration for an Atrial Defibrillator	07/924109	8/3/92	5304139	4/19/94
Method for Atrial Defibrillation	07/924323	8/3/92	5279291	1/18/94
Atrial Defibrillator and Method for Providing Pre-Cardioversion Warning	07/996656	12/24/92	5332400	7/26/94

<b>Title</b>	<b>Appln. No.</b>	<b>Appln. Date</b>	<b>Patent No.</b>	<b>Issue Date</b>
Atrial Defibrillator and Method for Setting Energy Threshold Values	08/001454	1/7/93	5395373	3/7/95
Implantable Atrial Defibrillator Having an Intermittently Activated Fibrillation Detector	08/232767	4/25/94	5464432	11/7/95
Atrial Defibrillator and Method for Providing T Wave Detection and Interval Timing Prior to Cardioversion	08/067688	5/26/93	5350402	9/27/94
Crosspoint Switch with Improved Discharge Control for Use in an Implantable Defibrillator	08/091213f	7/13/93	5312444	5/17/94
Improved Electrode System for Use with an Implantable Cardiac Patient Monitor	08/043269	4/6/93	5388578	2/14/95
Implantable Cardiac Patient Monitor	08/157605	11/24/93	5411031	5/2/95
Selective Cardiac Activity Analysis Atrial Fibrillation Detection System and Method and Atrial Defibrillator	08/233251	4/26/94	5522852	6/4/96
Combined Mapping, Pacing, and Defibrillating Catheter	08/184375	1/21/94	5405375	4/11/95
Implantable Lead Having a Steering Distal Guide Tip	08/145716	11/2/93	5531781	7/2/96
Lead System for Use with an Atrial Defibrillator and Method	08/130308	10/1/93	5350404	9/27/94
Intravenous Cardiac Lead with Improved Fixation and Method	08/147330	11/3/93	5387233	2/7/95
Defibrillation and Method for Cardioverting Heart and Storing Related Activity Data	08/264319	6/23/94	5522850	6/4/96
Atrial Fibrillation Type Selective Cardiovertor and Method	08/331898	10/31/94	5549641	8/27/96
Automatic Gain Control and Method for Enabling Detection of Low and High Amplitude Depolarization Activation Waves of	08/213119	3/15/94	5458621	10/17/95
Atrial Defibrillator and Method Providing Dual Reset of an Interval Timer	08/259515	6/14/94	5464433	11/7/95
An Implantable Atrial Defibrillator Having an Intermittently Activated Pacing Modality	08/243858	5/17/94	5527345	6/18/96



<b>Title</b>	<b>Appln. No.</b>	<b>Appln. Date</b>	<b>Patent No.</b>	<b>Issue Date</b>
Atrial Defibrillator and Method for Providing Interval Timing of Successive Intervals Prior to Cardioversion	08/289701	8/12/94	5486198	1/23/96
Cardioversion Synchronization System and Method for an Atrial Defibrillator	08/259476	6/14/94	5584864	12/17/96
System and Method for Reducing False Positives in Atrial Fibrillation Detection	08/278055	7/20/94	5486199	1/23/96
Vascular Catheter Assembly for Tissue Penetration and for Cardiac Stimulation and Methods Thereof	07/695724	5/6/91	5330496	7/19/94
Defibrillator and Method Utilizing Three Channel Sensing	08/297145	8/29/94	5403354	4/4/95
Coronary Sinus Channel Lead and Method	08/290606	8/15/94	5476498	12/19/95
Atrial Defibrillator Having Patient Activated Modality	08/306665	9/15/94	5490862	2/13/96
Atrial Fibrillation Detector and Defibrillator Using the Same	08/346484	11/29/94	5509925	4/23/96
Therapy Termination in an Atrial Defibrillator and Method	08/346500	11/29/94	5554175	9/10/96
Selective Default Data Storage for an Implantable Atrial Defibrillator	08/377913	1/25/95	5507780	4/16/96
Implantable Atrial Defibrillator Having Delayed Intervention Therapy	08/383894	2/6/95	5441519	8/15/95
Implantable Atrial Defibrillator Having Ischemia Coordinated Intervention Therapy and Method	08/391156	2/21/95	5531768	7/2/96
Atrial Fibrillation Detector	08/410829	3/27/95	5464431	11/7/95
Atrial Defibrillator Having Both Specific and Sensitive R Wave Detection	08/423968	4/18/95	5562709	10/8/96
Cardiac Lead with Composite Insulating Structure	08/429886	4/27/95	5628774	5/13/97
Implantable Atrial Defibrillator Having Cardioverting Output Voltage Limiting for Simulating Larger Storage	08/541682	10/10/95	5620467	4/15/97
System and Method for Implanting an Implantable Cardiac Device	08/561884	11/22/95	5662691	9/2/97

<b>Title</b>	<b>Appln. No.</b>	<b>Appln. Date</b>	<b>Patent No.</b>	<b>Issue Date</b>
Implantable Atrial Defibrillator and System Having Multiple Channel Electrogram Telemetry and Method	08/545397	10/19/95	5578063	11/26/96
Post-Heart Surgery Cardioverting System and Method	08/608410	2/28/96	RE 35779	4/28/98
Implantable Atrial Defibrillator Providing Reduced Cardioversion Discomfort	08/576671	12/21/95	5813999	9/29/98
Atrial Defibrillator and Method for Providing Adaptive Control of Defibrillator Output Voltage	08/641100	4/29/96	5674250	10/7/97
Atrial Defibrillation System Having a Portable Communication Device	08/641976	5/2/96	5674249	10/7/97
Defibrillation System Including an Atrial Defibrillator and Ventricular Defibrillation Backup	08/641783	5/2/96	5697954	12/16/97
Temporary, Post-Heart Surgery Cardioverting and Pacing System and Lead Systems for Use Therein	08/627688	4/2/96	5766224	6/6/98
Post Atrial Cardioversion Atrial Pacing and Method	08/659138	6/4/96	5645569	7/8/97
Implantable Lead Suture Sleeve	08/630920	4/5/96	5683403	11/4/97
Cardioversion System with Cardioverting Energy Attenuator	08/708218	9/6/96	5674253	10/7/97
Post Atrial Cardioversion High Rate Atrial Pacing with Gradual Rate Return	08/730500	10/11/96	5676687	10/14/97
System and Method for Determining Spatial Organization of Atrial Activation	08/738329	10/25/96	5676153	10/14/97
Atrial Flutter Cardioverter and Method	08/835169	4/7/97	5814081	9/29/98
Method of Releasing Conductive Elements from Fibrotic Tissue	08/846413	4/3/97	5785059	7/28/98
System for Detecting Atrial Fibrillation Notwithstanding High and Variable Ventricular Rates	08/970879	11/14/97		
Atrial Tracking Cardiac Stimulator	09/034542	3/3/98		
Atrial Defibrillation System Including a Portable Audible Speech Communication Device	09/060544	4/15/98		

<b>Title</b>	<b>Appln. No.</b>	<b>Appln. Date</b>	<b>Patent No.</b>	<b>Issue Date</b>
Atrial Defibrillation System Having Patient Selectable Atrial Fibrillation Detection	09/060723	4/15/98		
Implantable Atrial Defibrillator Having Therapy Inhibition Responsive to Atrial Cycle Length	08/984588	12/3/97		
Dual Chamber Pulse Generator with Periodic PMT Control	09/099045	6/17/98		
Method and System for Detecting Dislodgment of an Implanted Right Atrial Endocardial Lead	09/102844	6/23/98		
Method and System for Detecting Dislodgment of an Implanted Right Atrial Endocardial Lead Using Sensing Periods	09/102855	6/23/98		
Atrial Cardioverter with Window Based Atrial Tachyarrhythmia Detection System and Method	09/130385	8/6/98		
Cardioverter and Method for Cardioverting an Atrial Tachyarrhythmia in the Presence of Atrial Pacing	09/148094	9/3/98		
Cardioverter and Method for Cardioverting an Atrial Tachyarrhythmia While Maintaining Atrial Pacing	09/146948	9/3/98		
System and Method for Reliably Detecting Atrial Events of a Heart Using Atrial Sensing	09/108902	7/1/98		
Method and System for Detecting Dislodgment of an Implanted Right Atrial Endocardial Lead Using a Sensing Period	09/103218	6/23/98		
System and Method for Detecting Atrial Events of a Heart	09/108898	7/1/98		