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COMMISSIONER OF PATENTS AND TRADEMARKS BOX ASSIGNMENTS WASHINGTON, D.C. 20231

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

- Name of conveying party(ies): Jungkuk Kim Jesse W. Hartley Qingsheng Zhu
- Name and address of receiving party(ies):
 Name: CARDIAC PACEMAKERS, INC.
 Street Address: 4100 North Hamline Avenue

City: St. Paul

State: Minnesota Zip: 55112-5798

3. Nature of Conveyance:

X_	Assignment	 Merger		
	Security Agreement	Change	of	Name
	Other	 		

Execution Date: July 22, 1998

- 4. Application number(s) or registration number(s):

 If this document is being filed together with a new application, the execution date of the application is:
 - A. Patent Application No.: 09/094,773
 - B. Patent No.(s):
- 5. Name and address of party of whom correspondence concerning document should be mailed:

Name: Paul T. Dietz, Esq.

HAUGEN AND NIKOLAI, P.A.

Street Address: 900 Second Avenue South, #820

City: Minneapolis State: MN Zip: 55402-3325

PATENT REEL: 9371 FRAME: 0626 08/07/1998 JA 01 FC:581

- 6. Number of applications and patents involved: 1
- 7. Total Fee (37 CFR 3.41): \$40.00 X_ Check enclosed for this amount.
- 8. The Commissioner is authorized to charge any fees or refund any overpayment under 37 CFR 1.16 and 1.17 which may be required by this paper to Deposit Account No. 08-1265.

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9. 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.

Paul T. Dietz Name of Person Signing Date: July 30, 1998

Total number of pages including cover sheet, attachments and document: 5

ASSIGNMENT

WHEREAS, we, Jungkuk Kim, Jesse W. Hartley and Qingsheng Zhu, citizens of the Republic of Korea, the United States of America and the Peoples Republic of China, and residing at 1037 Lovell Avenue, Roseville, Minnesota 55113, 339 Linda Court, Lino Lakes, Minnesota 55014 and 3025 Valento Iane, Little Canada, Minnesota 55117, respectively, are the co-inventors of that certain invention disclosed and claimed in the application for United States Letters Patent, filed on June 15, 1998, under Serial No. 09/094,773, and entitled "AUTOMATIC THRESHOLD SENSITIVITY ADJUSTMENT FOR CARDIAC RHYTHM MANAGEMENT DEVICES" and

WHEREAS, Cardiac Pacemakers, Inc., a corporation organized and existing under the laws of the State of Minnesota, and having its principal place of business at 4100 North Hamline Avenue, St. Paul, Minnesota 55112-5798, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid by said Cardiac Pacemakers, Inc. and for other good and valuable consideration, the receipt of all of which is hereby acknowledged, we, Jungkuk Kim, Jesse W. Hartley and Qingsheng Zhu, have sold, assigned and transferred, and by these presents do hereby sell, assign and transfer unto said Cardiac Pacemakers, Inc., the full and exclusive right to the said above identified invention in the United States and its territorial

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PATENT REEL: 9371 FRAME: 0628 possessions and in all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations and extensions thereof.

We hereby authorize and request the Patent Office officials in the United States and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said Cardiac Pacemakers, Inc., as assignee of our entire right, title and interest in and to the same, for the sole use and behoof of said Cardiac Pacemakers, Inc., its successors and assigns.

Further, we agree that we will communicate to said Cardiac Pacemakers, Inc. or its representatives any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said Cardiac Pacemakers, Inc., make all rightful oaths and generally do everything possible to aid said Cardiac Pacemakers, Inc., its successors and assigns, to obtain and enforce proper protection for said invention in the United States and in any and all foreign countries.

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IN TE	STIMONY WHEREOF, we have hereunto set our hands this
day	of <u>July</u> , 1998.
	Frank K.
	Jungkuk Kim
	que de Production de la companya de
	Jesse W. Hartley
	RECEDENCE OF THE PROPERTY OF T
	Qingsheng Zhu
Public for Jungkuk Kim the person acknowledg and deed.	day of, 1998, before me, a Notary and within the County aforesaid, personally appeared , Jesse W. Hartley and Qingsheng Zhu, to me known to be as described in the foregoing Assignment, and they ed to me that they executed the same as their free act
Notary Pub	lic
(SEAL)	BRENDA S VENJOHN NOTARY PUBLIC - MINNESOTA My Comm. Expires Jan. 31, 2000

RECORDED: 08/05/1998