Form PTO-1595 (Rev. 07/05) DMB No. 0651-0027 (exp. 6/30/2008)	U.S. DEPARTMENT OF COMMERCE United States Patent and <u>Trademark Office</u>		
RECORDATION FORM COVER SHEET PATENTS ONLY To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.			
		1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
		Robert A. Jacobson Elisio C. Das Neves	Name: CTS Corporation
Glen Reeser Thomas A. Knecht	Internal Address:		
Additional name(s) of conveying party(ies) attached? Yes 🖌 No 3. Nature of conveyance/Execution Date(s):	Street Address: <u>905 West Boulevard North</u>		
Execution Date(s)			
Assignment Merger	··		
Security Agreement Change of Name	City: Elkhart		
Joint Research Agreement	State: Indiana		
Government Interest Assignment			
Executive Order 9424, Confirmatory License	Country: United States Zip: 46514		
Other	Additional name(s) & address(es) attached? 🛄 Yes 🗹 No		
4. Application or patent number(s):	document is being filed together with a new application.		
A. Patent Application No.(s)	B. Patent No.(s)		
11/985,132			
Additional numbers at	I tached? ☐Yes ✔No		
5. Name and address to whom correspondence	6. Total number of applications and patents		
concerning document should be mailed:	involved: One		
Name: Joan C. Ramm	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00		
Internal Address:	Authorized to be charged by credit card		
	Authorized to be charged to deposit account		
Street Address: CTS Corporation			
171 Covington Drive	None required (government interest not affecting title		
City: Bloomingdale	8. Payment Information		
· ·	a. Credit Card Last 4 Numbers		
State: IIIInolsZip: 60108	Expiration Date		
Phone Number: (630) 924-3792	b. Deposit Account Number <u>03-1677</u>		
Fax Number: (630) 295-6601	Authorized User Name Joan Remm		
Email Address:			
9. Signature: Ofm C. Kamm			
J Signature	Date		
Joan C. Ramm	Total number of pages including cover		

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

WHEREAS, I, Robert A. Jacobson, of the Village of Orland Park, County of Cook, in the State of Illinois, have made a certain new and useful invention entitled "VOLTAGE CONTROLLED OSCILLATOR MODULE WITH BALL GRID ARRAY RESONATOR", including the subject matter described and claimed in the application for Letters Patent of the United States, U.S. Application Serial No. 11/985,132 filed November 14, 2007; and

WHEREAS, CTS CORPORATION, a corporation duly organized under the laws of the State of Indiana and doing business in the City of Elkhart, the County of Elkhart and the State of Indiana, is desirous of acquiring the full and exclusive right, title and interest which I have or may have in and to the invention and the application, including any continuation and any division of the application, and any Letters Patent of the United States and of foreign countries that may be granted for the invention, and any renewal, any reissue and any extension of any such Letters Patent;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that for good and valuable consideration, I do hereby assign to CTS CORPORATION all the right, title and interest which I have or may have in and to the invention and the application and any Letters Patent of the United States and of foreign countries that may be granted for the invention and any renewal, any reissue and any extension of any such Letters Patent; the same to be held and enjoyed by CTS CORPORATION, its successors, legal representatives and assigns, as fully and entirely as the same would have been held and enjoyed by me if this assignment had not been made; and I hereby covenant and warrant that I have not executed and will not execute any instrument purporting to convey, mortgage, lease or otherwise transfer all, or any part of the interest, to anyone other than CTS CORPORATION, its successors, legal representatives and assigns.

And, for the above consideration, I hereby covenant and agree that I will, at the request of CTS CORPORATION, its successors, legal representatives and assigns, execute any and all renewal, continuation and divisional applications, both United States and foreign, for Letters Patent for the invention; and any and all applications for the renewal, the reissue and the extension of any Letters Patent, both United States and foreign, that may be granted for the invention and do any and all other and further acts to obtain any such Letters Patent, and any renewal, any reissue and any extension of the same that CTS CORPORATION, its successors, legal representatives and assigns may deem necessary or expedient, without further compensation, but at the expense of CTS CORPORATION, its successors, legal representatives and assigns.

Lit G. Robert A. Jacobson Dated: 12/17/07)) SS STATE OF ILLINOIS COUNTY OF DUPAGE

I, Joan C. Ramm, Notary Public in and for said County, in the State aforesaid, do hereby certify that Robert A. Jacobson, personally known to me to be the same person whose name is subscribed to in the foregoing instrument, appeared before me this day in person and acknowledged that he signed, scaled and delivered such instrument as his free and voluntary act for the uses and purposes set forth.

GIVEN under my hand and Notarial Seal this <u>17th</u> day of <u>December</u>, 2007.

(NOTARIAL SEAL)



WHEREAS, I, Elisio C. Das Neves, of the City of Sycamore, County of DeKalb, in the State of Illinois, have made a certain new and useful invention entitled "VOLTAGE CONTROLLED OSCILLATOR MODULE WITH BALL GRID ARRAY RESONATOR", including the subject matter described and claimed in the application for Letters Patent of the United States, U.S. Application Serial No. 11/985,132 filed November 14, 2007; and

WHEREAS, CTS CORPORATION, a corporation duly organized under the laws of the State of Indiana and doing business in the City of Elkhart, the County of Elkhart and the State of Indiana, is desirous of acquiring the full and exclusive right, title and interest which I have or may have in and to the invention and the application, including any continuation and any division of the application, and any Letters Patent of the United States and of foreign countries that may be granted for the invention, and any renewal, any reissue and any extension of any such Letters Patent;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that for good and valuable consideration, I do hereby assign to CTS CORPORATION all the right, title and interest which I have or may have in and to the invention and the application and any Letters Patent of the United States and of foreign countries that may be granted for the invention and any renewal, any reissue and any extension of any such Letters Patent; the same to be held and enjoyed by CTS CORPORATION, its successors, legal representatives and assigns, as fully and entirely as the same would have been held and enjoyed by me if this assignment had not been made; and I hereby covenant and warrant that I have not executed and will not execute any instrument purporting to convey, mortgage, lease or otherwise transfer all, or any part of the interest, to anyone other than CTS CORPORATION, its successors, legal representatives and assigns.

And, for the above consideration, I hereby covenant and agree that I will, at the request of CTS CORPORATION, its successors, legal representatives and assigns, execute any and all renewal, continuation and divisional applications, both United States and foreign, for Letters Patent for the invention; and any and all applications for the renewal, the reissue and the extension of any Letters Patent, both United States and foreign, that may be granted for the invention and do any and all other and further acts to obtain any such Letters Patent, and any renewal, any reissue and any extension of the same that CTS CORPORATION, its successors, legal representatives and assigns may deem necessary or expedient, without further compensation, but at the expense of CTS CORPORATION, its successors, legal representatives and assigns.

Dated: 12-13-07.)) SS STATE OF ILLINOIS COUNTY OF DUPAGE

I, Joan C. Ramm, Notary Public in and for said County, in the State aforesaid, do hereby certify that Elisio C. Das Neves, personally known to me to be the same person whose name is subscribed to in the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered such instrument as his free and voluntary act for the uses and purposes set forth.

GIVEN under my hand and Notarial Scal this <u>17th</u> day of <u>December</u>, 2007.

(NOTARIAL SEAL)



WHEREAS, I, Glen Reeser, of the Village of Palatine, Cook County, Illinois, have made a certain new and useful invention entitled "VOLTAGE CONTROLLED OSCILLATOR MODULE WITH BALL GRID ARRAY RESONATOR", including the subject matter described and claimed in the application for Letters Patent of the United States, U.S. Application Serial No. 11/985,132 filed November 14, 2007; and

WHEREAS, CTS CORPORATION, a corporation duly organized under the laws of the State of Indiana and doing business in the City of Elkhart, the County of Elkhart and the State of Indiana, is desirous of acquiring the full and exclusive right, title and interest which I have or may have in and to the invention and the application, including any continuation and any division of the application, and any Letters Patent of the United States and of foreign countries that may be granted for the invention, and any renewal, any reissue and any extension of any such Letters Patent;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that for good and valuable consideration, I do hereby assign to CTS CORPORATION all the right, title and interest which I have or may have in and to the invention and the application and any Letters Patent of the United States and of foreign countries that may be granted for the invention and any renewal, any reissue and any extension of any such Letters Patent; the same to be held and enjoyed by CTS CORPORATION, its successors, legal representatives and assigns, as fully and entircly as the same would have been held and enjoyed by me if this assignment had not been made; and I hereby covenant and warrant that I have not executed and will not execute any instrument purporting to convey, mortgage, lease or otherwise transfer all, or any part of the interest, to anyone other than CTS CORPORATION, its successors, legal representatives and assigns.

And, for the above consideration, I hereby covenant and agree that I will, at the request of CTS CORPORATION, its successors, legal representatives and assigns, execute any and all renewal, continuation and divisional applications, both United States and foreign, for Letters Patent for the invention; and any and all applications for the renewal, the reissue and the extension of any Letters Patent, both United States and foreign, that may be granted for the invention and do any and all other and further acts to obtain any such Letters Patent, and any renewal, any reissue and any extension of the same that CTS CORPORATION, its successors, legal representatives and assigns may deem necessary or expedient, without further compensation, but at the expense of CTS CORPORATION, its successors, legal representatives and assigns.

Dated: 12/17/07 STATE OF ILLINOIS

Hen Reeser

COUNTY OF DUPAGE

I, Joan C. Ramm, Notary Public in and for said County, in the United States, do hereby certify that Glen Reeser, personally known to me to be the same person whose name is subscribed to in the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered such instrument as his free and voluntary act for the uses and purposes set forth.

GIVEN under my hand and Notarial Seal this <u>17th</u> day of <u>December</u>, 2007.

(NOTARIAL SEAL)



WHEREAS, I, Thomas A. Knecht, of the Village of Dundee, Kane County, Illinois, have made a certain new and useful invention entitled "VOLTAGE CONTROLLED OSCILLATOR MODULE WITH BALL GRID ARRAY RESONATOR", including the subject matter described and claimed in the application for Letters Patent of the United States, U.S. Application Serial No. 11/985,132 filed November 14, 2007; and

WHEREAS, CTS CORPORATION, a corporation duly organized under the laws of the State of Indiana and doing business in the City of Elkhart, the County of Elkhart and the State of Indiana, is desirous of acquiring the full and exclusive right, title and interest which I have or may have in and to the invention and the application, including any continuation and any division of the application, and any Letters Patent of the United States and of foreign countries that may be granted for the invention, and any renewal, any reissue and any extension of any such Letters Patent;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that for good and valuable consideration, I do hereby assign to CTS CORPORATION all the right, title and interest which I have or may have in and to the invention and the application and any Letters Patent of the United States and of foreign countries that may be granted for the invention and any renewal, any reissue and any extension of any such Letters Patent; the same to be held and enjoyed by CTS CORPORATION, its successors, legal representatives and assigns, as fully and entirely as the same would have been held and enjoyed by me if this assignment had not been made; and I hereby covenant and warrant that I have not executed and will not execute any instrument purporting to convey, mortgage, lease or otherwise transfer all, or any part of the interest, to anyone other than CTS CORPORATION, its successors, legal representatives and assigns.

And, for the above consideration, I hereby covenant and agree that I will, at the request of CTS CORPORATION, its successors, legal representatives and assigns, execute any and all renewal, continuation and divisional applications, both United States and foreign, for Letters Patent for the invention; and any and all applications for the renewal, the reissue and the extension of any Letters Patent, both United States and foreign, that may be granted for the invention and do any and all other and further acts to obtain any such Letters Patent, and any renewal, any reissue and any extension of the same that CTS CORPORATION, its successors, legal representatives and assigns may deem necessary or expedient, without further compensation, but at the expense of CTS CORPORATION, its successors, legal representatives and assigns.

Dated: [2 STATE OF ILLINOIS) SS COUNTY OF DUPAGE

Thomas A. Knecht

I, Joan C. Ramm, Notary Public in and for said County, in the United States, do hereby certify that Thomas A. Knecht, personally known to me to be the same person whose name is subscribed to in the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered such instrument as his free and voluntary act for the uses and purposes set forth.

GIVEN under my hand and Notarial Seal this <u>17th</u> day of <u>December</u>, 2007. $\rightarrow oon C Rammon NOTARY PUBLIC$

(NOTARIAL SEAL)



RECORDED: 12/17/2007