03-29-1999



Docket No.: CTS-1846

PATENT APPLICA

100998167

N FORM COVER SHEET

To the Honorable Commissioner of Patents and Trademarks:

Please record the attached original documents or copy thereto:

1. Name of conveying party(ies):

Name: Paul N. Shepherd

Additional name(s) of conveying party(ies) attached? ___ Yes X No

2.	Name	and address	of receiving party(ies):
		Name:	CTS Corporation

Attn: Ch

Cheri L. Howe

905 West Boulevard North

Elkhart, IN 46514

Additional name(s) & address(es) attached? Yes X No

3.	Nature	of	conveyance:
J .	MACULE	-	COLLIE CYCLICC.

X	Assignment	Merger				
	Security Agreement		Change	of	Name	
	Other					_

Execution Date: 3/8/99

09/270,346

4. Application number(s) or patent number(s): If the document is being filed together with a new application, the execution date of the application is: 3/2/99

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A. Patent Application No(s).

B. Patent No(s).

Additional numbers attached?

Yes x No
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5. Name and address of party to whom correspondence concerning document should be mailed:

Name: CTS Corporation Attn: Cheri L. Howe

905 West Boulevard North

Elkhart, IN 46514

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) \$40.00

Enclosed
X Authorized to be charged to deposit account

8. Deposit account number: 03-1677 (Attached duplicate copy of this page)

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.

Mark P. Bourgeois
Name of Person Signing
Reg. No. 37,782

Signature

3/16/1999 Date

03/29/1999 VBRDWN 00000097 031677al09270386er of pages comprising cover sheet: [1] 01 FC:581 40.00 CH

FORM PTO-1594

Docket No.: CTS-1846

ASSIGNMENT

WHEREAS, I, Paul N. Shepherd of the City of West Lafayette, County of Tippecanoe, in the State of Indiana, have made a certain new and useful invention entitled "Low Temperature Co-fired Ceramic with Improved Registration" for which I am making application for Letters Patent of the United States, which application is being duly executed by me on the 16th day of March, 1999.

WHEREAS, I, the said inventor, am the owner of the entire right, title and interest in and to said invention and said application; 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 said invention and said application, including any continuation and any division of said application, and any Letters Patent of the United States and of foreign countries that may be granted for said 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 sell, assign, transfer and set over unto the said CTS CORPORATION all the right, title and interest which I have or may have in and to said invention and said application and any Letters Patent of the United States and of foreign countries that may be granted for said invention and any renewal, any reissue and any extension of any such Letters Patent; the same to be held and enjoyed by said 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 the full right to convey the entire interest herein assigned and that I have not executed and will not execute any instrument purporting to convey, mortgage, lease or otherwise transfer all, or any part of said interest, to anyone other than said CTS CORPORATION, its successors, legal representatives and assigns.

I authorize and request the Commissioner of Patents of the United States to issue any Letters Patent which may be granted upon the aforesaid application or applications to CTS CORPORATION.

And, for the above consideration, I hereby covenant and agree that I will, at the request of said 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 said 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 said 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 said CTS CORPORATION, its successors, legal representatives and assigns may deem necessary or expedient, without further compensation, but at the expense of said CTS CORPORATION, its successors, legal representatives and assigns.

PATENT REEL: 9838 FRAME: 0066

Docket No.: CTS-1846

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 8 day of March, 1999.

Paul N. Shepheld

STATE OF INDIANA

SS(

COUNTY OF Lypicanie

I, <u>Recalite Die Velleting</u>, Notary Public in and for said County, in the State aforesaid, do hereby certify that Paul N. Shepherd, 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 3 day of March, 1999.

Elizabeth Whitney

(NOTARIAL SEAL)