To the Honorable Commissioner of Patents:

1. Name of conveying party(ies):
   Allwine, Elmer C.

Additional names of conveying party(ies) attached?
  □ yes  □ no

3. Nature of Conveyance
   □ Assignment  □ Merger  □ Security Agreement  □ Change of Name
   Other  Consulting Agreement

Execution Date: October 1, 1996.

4. Application number(s) or patent number(s):

   TITLE: APPARATUS AND METHOD FOR SENSING AN ANGULAR POSITION
   If this document is being filed together with a new application, the execution date of the application is May 20, 1999.

   A. Patent Application No(s).
   B. Patent No(s).

   09/323369

   Additional numbers attached? □ Yes  □ No

5. Name and address of party to whom correspondence concerning document should be mailed:

   S. Jared Pitts
   Schmeiser, Olsen & Watts
   20 West First Street
   Mesa, Arizona 85201

6. Total number of applications and patents involved: 1

7. Total fee (37 C弗V 3.41):
   □ Enclosed
   □ Authorized to be charged to deposit account
   □ Total fee due
   □ Any deficiencies in the enclosed fees

8. Deposit account number:
   19-0513

(DO NOT USE THIS SPACE)

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.

   S. Jared Pitts
   Name of Person Signing
   Reg. No. 38, 579

   June 1, 1999
   Signature
   Date

Total number of pages comprising cover sheet: 1
CONSULTING AGREEMENT

THIS AGREEMENT is made and entered into this 2 day of October, 1996 ("Effective Date") by and between CTS CORPORATION, Automotive Business Unit, located at 1142 West Beardsley Avenue, Elkhart, Indiana (hereinafter referred to as "CTS") and Elmer C. Allwine (hereinafter referred to as "Consultant").

WHEREAS, CTS desires to hire Consultant in connection with the development of crank sensors and other areas; and

WHEREAS, Consultant has expertise in such areas, owns U.S. patent numbers 5,218,251; 5,258,735; 5,313,159; 5,369,323; and 5,440,185 and certain foreign counterpart patents thereto (hereinafter referred to in the aggregate as "Consultant's Patents," and desires to work with CTS on the development of such areas.

NOW THEREFORE, the parties agree as follows:

1. **Services:** During the term of this Agreement, Consultant agrees to render consulting and advisory services in the area of: crank sensor development and as otherwise agreed in the "STATEMENT OF WORK" attached hereto as Exhibit A. Consultant agrees to document all novel processes, procedures and materials to assist in the preparation of patent applications and documentation of trade secrets. All services must be authorized by CTS prior to commencement by Consultant.

2. **Consultant's Fee:** CTS agrees to pay Consultant, and Consultant agrees to accept for Consultant's services under this Agreement, One Hundred Dollars ($100.00) per hour of service, together with reimbursement of CTS-requested travel and other reasonable out-of-pocket expenses incurred in rendering services hereunder. CTS shall make payments to Consultant in accordance with this paragraph within fifteen (15) days of receipt of an invoice from Consultant itemizing the number of hours on which services were rendered and any incidental expenses incurred in rendering such services.

3. **Independent Contractor:** Consultant agrees that this consulting Agreement creates only an independent contractual relationship between the parties and does not establish an employment relationship or entitle Consultant to any of the benefits thereof.

4. **Terms and Termination:** This Agreement shall continue in effect until September 1, 1998, unless earlier terminated in accordance with this section. Either party may terminate this Agreement upon thirty (30) days prior written notice to the other party. In the event that Consultant breaches any term of this Agreement, CTS may, without foregoing any other rights or remedies, immediately terminate Consultant's services. In the event this Agreement is terminated, Consultant shall be paid only those amounts which accrued prior to termination and shall not be entitled to any other amounts, including but not limited to damages or lost profits.
5. **Ownership of Work Product:** Consultant agrees to, and does hereby assign and transfer to CTS, Consultant's entire right, title and interest in and to all Work Product which Consultant may invent, conceive, discover, develop or learn during or in connection with consulting and advisory services provided by Consultant under this Agreement. Consultant shall notify CTS promptly and shall keep CTS continually updated on all such Work Product and shall assist CTS in obtaining patents or copyrights, as the case may be, in such Work Product. "Work Product" includes but is not limited to inventions, discoveries, trade secrets, shop rights, proprietary rights, improvements, processes, developments, methods, formulas and designs which are developed, discovered, conceived or learned during or in connection with consulting and advisory services provided by Consultant under this Agreement.

CTS acknowledges that it does not acquire under this Agreement any ownership interest in, nor any right to use for any purpose any invention covered by Consultant's Patents. CTS further acknowledges that to the extent that the practice of any Work Product by CTS necessitates the use of any invention covered by Consultant's Patents, CTS may not practice such Work Product without first obtaining a license from Consultant under Consultant's Patents. Consultant agrees to negotiate in good faith a license agreement with CTS if requested to do so by CTS. Consultant shall not sign a license agreement on Consultant's Patents prior to January 1, 1999 without offering CTS the right of first refusal of such license agreement; provided, however, that CTS will have three (3) months in which to exercise such right of first refusal, after which Consultant shall be free to enter into a license agreement with another party.

6. **Confidential Information:** The parties have executed a Confidential Disclosure Agreement dated August 14, 1996 which is incorporated herein by reference. In the event that the parties desire Consultant to provide services in areas pursuant to this Agreement which are not covered under the above referenced Confidential Disclosure Agreement, the parties shall sign another Confidential Disclosure Agreement.

7. **Agreement Not to Compete:** Consultant agrees that during the term of this Agreement Consultant will not engage in any business, either directly or indirectly, or through substantial ownership, that may be competitive with CTS.

8. **Survival of Certain Agreements:** The covenants and agreements set forth in Paragraphs 5 and 6 shall survive termination of this Agreement and Consultant's services hereunder, and shall remain in full force and effect regardless of the cause of such termination.

9. **Assignment:** This Agreement shall not be assignable by Consultant without the prior written consent of CTS; any attempted assignment is void.

10. **Entire Agreement:** This Agreement constitutes the entire agreement between the parties, no representations having been made by any of the parties except as are herein
specifically set forth. This Agreement may be modified in writing by mutual agreement of
the parties.

11. Interpretation: This Agreement shall be governed by the laws of the State of
Indiana.

12. Notices: Any correspondence or notifications concerning this Agreement will be
addressed to CTS as follows:

CTS Corporation
Attn: Robert Oldenburg
1141 West Beardsley Avenue
Elkhart, IN 46514

Mr. Elmer Allwine
2960 Mark Avenue
Santa Clara, CA 95051

IN WITNESS WHEREOF, CTS and Consultant have executed this Agreement on
the date specified below:

CTS CORPORATION

By Robert T. Oldenburg
Title Director, Product Engineering

Date 10/4/96

ELMER ALLWINE

By Elmer C. Allwine

Date 10/11/96

REEL: 010030 FRAME: 0558