	02-08-2006
Form PTO-1595 (Rev. 03/05) Doc Code: OMB No. 0651-0027 (exp. 6/30/2005) RECORDATION F PATE.	PARTMENT OF COMMER Partment of Commer
	ase record the attached documents or the new address(es) below.
1. Name of conveying party(ies) 2. Name and address of receiving party(ies)	
Joseph Trent Bogard	Name: Arvin Technologies, Inc.
	Internal Address:
Additional name(s) of conveying party(ies) attached? 🛄 Yes 🛛 No	
3. Nature of conveyance/Execution Date(s):	Street Address: 2135 West Maple Road
Execution Date(s) 9/2/05	
Assignment Merger	City: Troy
Security Agreement Change of Name	State: Michigan
Joint Research Agreement	
Government Interest Assignment	Country: Zip: <u>48084</u>
Executive Order 9424, Confirmatory License	
[] Other	Additional name(s) & address(es) attached? 🗋 Yes 🔿 🖾 No
4. Application or patent number(s):	s document is being filed together with a new application.
A. Patent Application No.(s) 11/219,150	B. Patent No.(s)
Additional numbers a	Ittached? □ Yes ⊠ No □ □ ↓
5. Name and address to whom correspondence concerning document should be mailed:	
Name: Shawn D. Bauer	
Juan Diami D. Daug	Image: Second state of applications and patents Image: Second state of applications Image: Second state
Internal Address: BARNES & THORNBURG LLP	involved: <u>1</u>
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	involved: 1 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ⁻¹⁰ 3 Image: Description of the state of the sta
Internal Address: BARNES & THORNBURG LLP	involved: 1 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ⁻¹¹ 3 Image: Im
Internal Address: BARNES & THORNBURG LLP Street Address: 11 S. Meridian Street	involved: 1 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ⁻¹⁰ 3 Image: Description of the state of the sta
Internal Address: BARNES & THORNBURG LLP Street Address: 11 S. Meridian Street City: Indianapolis	involved: 1 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ⁻¹¹ 3 Image: Im
Internal Address: BARNES & THORNBURG LLP Street Address: 11 S. Meridian Street City: Indianapolis State: IN Zip: 46204	involved: 1 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address: BARNES & THORNBURG LLP Street Address: 11 S. Meridian Street City: Indianapolis State: IN Zip: 46204 Phone Number: (317) 231-7313	involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ¹ 3 Image: Authorized to be charged by credit card 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 Image: Authorized to be charged to deposit account 3 3 Image: Authorized to be charged to deposit account 3 3 3 Image: Authorized to be charged to deposit account 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Internal Address: BARNES & THORNBURG LLP Street Address: 11 S. Meridian Street City: Indianapolis State: IN Zip: 46204	involved: 1 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ° ? 40.00 ° ? □ Authorized to be charged by credit card ⊠ Authorized to be charged to deposit account □ Enclosed □ None required (government interest not affecting titlet) 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date
Internal Address: BARNES & THORNBURG LLP Street Address: 11 S. Meridian Street City: Indianapolis State: IN Zip: 46204 Phone Number: (317) 231-7313 Fax Number: (317) 231-7433 Email Address: kmays@btlaw.com	involved: 1 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ⁻⁰ 3 Involved: Authorized to be charged by credit card Involved: Authorized to be charged to deposit account Involved: Enclosed Involved: None required (government interest not affecting titlettic structure) 8. Payment Information a. Credit Card Last 4 Numbers Involved: Expiration Date Involved: 10-0435 Authorized User Name Shawn D. Bauer
Internal Address: BARNES & THORNBURG LLP Street Address: 11 S. Meridian Street City: Indianapolis State: IN Zip: 46204 Phone Number: (317) 231-7313 Fax Number: (317) 231-7433 Email Address: kmays@btlaw.com 9. Signature:	involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ¹⁰ Involved: Authorized to be charged by credit card Involved: Involve:
Internal Address: BARNES & THORNBURG LLP Street Address: 11 S. Meridian Street City: Indianapolis State: IN Zip: 46204 Phone Number: (317) 231-7313 Fax Number: (317) 231-7433 Email Address: kmays@btlaw.com	involved: 1 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ⁻⁰ 3 Involved: Authorized to be charged by credit card Involved: Authorized to be charged to deposit account Involved: Enclosed Involved: None required (government interest not affecting titlettic structure) 8. Payment Information a. Credit Card Last 4 Numbers Involved: Expiration Date Involved: 10-0435 Authorized User Name Shawn D. Bauer

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

PATENT REEL: 017532 FRAME: 0074

OMB No. 0651-0027 (exp. 6/30/2005) RECORDATION F(PATEN	09-14-2005 ARTMENT OF COMME Patent and Trademark 10,3080760
To the Director of the U.S. Patent and Trademark Office: Ple	ease record the attached documents or the new address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Joseph Trent Bogard	Name: Arvin Technologies, Inc.
	Internal Address:
Additional name(s) of conveying party(ies) attached? Yes X N 3. Nature of conveyance/Execution Date(s):	
Execution Date(s) Sept. 2, 2005	
Assignment Merger	City: Troy
Security Agreement Change of Name	
 Joint Research Agreement 	State. Micingan
Government Interest Assignment	Country:Zip: <u>48084</u>
Executive Order 9424, Confirmatory License	
Other	Additional name(s) & address(es) attached? 🗋 Yes 🛛 N
Additional numbers	
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
5. Name and address to whom correspondence concerning document should be mailed: Name: Shawn D. Bauer, Esq.	6. Total number of applications and patents involved:17. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
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5. Name and address to whom correspondence concerning document should be mailed: Name: Shawn D. Bauer, Esq. Internal Address: Barnes & Thornburg LLp Street Address: 11 South Meridian Street City: Indianapolis State: Indiana State: Indiana Phone Number: 317-231-7313 Fax Number: 317-231-7433 Email Address: SBAUER@btlaw.com 9. Signature: Kevin D. Bailey Name of Person Signing Documents to barecorded (including cover st	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 □ Authorized to be charged by credit card □ Authorized to be charged by credit card □ Authorized to be charged to deposit account ⊠ Enclosed □ None required (government interest not affecting till 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date

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PATENT REEL: 017532 FRAME: 0075

ASSIGNMENT TO BUSINESS CONCERN

Attorney Docket No.:	9501-78534	3
Client Reference No.:	05ARM0307	

ASSIGNMENT

	In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned,
Name(s) of Inventor(s)	Joseph Trent Bogard
	and,
	maker(s) of an invention which is the subject of an application for Letters Patent of the United States ("Application") entitled
Title of	EXHAUST SYSTEM WITH EXTERNAL HELMHOLTZ RESONATOR AND
Application	ASSOCIATED METHOD
Name of Assignce	the undersigned hereby sell(s), assign(s), and sct(s) over to Arvin Technologies, Inc.
Address of	2135 West Maple Road
principal	
place of business	Troy, MI 48084
Insert State of Incorporation (if applicable) or "Not Applicable"	a corporation of <u>Michigan</u>

(hereinafter designated as the Assignee) their entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom, all inventions therein disclosed, and any and all Letters Patent of the United States and of all other countries, including Canada, which may be granted for such inventions, or any of them, all such inventions and all rights in such Application and Letters Patent to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by them had this assignment and sale not been made.

The undersigned agree(s) to execute all papers necessary in connection with the application(s) in the United States and foreign countries and any continuing, divisional, or reissue applications thereof, and any reexamination of any of such applications, and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared or litigation concerning the application(s) or continuation, division, reissue, or reexamination thereof, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or litigation.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

PATENT REEL: 017532 FRAME: 0076

ASSIGNMENT TO BUSINESS CONCERN

The undersigned agree(s) to do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States and in all other countries where Assignee may desire to have such inventions, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from said application(s) or any division or divisions or continuing or reissue applications thereof, and any reexamination of any of such applications, to the said Assignee, as Assignee of the entire interest, and hereby covenants that the undersigned has full right to convey the interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the attorney of record the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Notumbus, IN WITNESS WHEREOF, I have executed this assignment at 2005 september this _ day of _ Pamila a. Kachen Witness Signature) Joseph Trent Bogard Inventor (Printed Name) U.S. Application No.

INIDS02 KDB 750763v1

Filing Date

PATENT REEL: 017532 FRAME: 0077

RECORDED: 02/06/2006