## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b). Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

Name and Address of Reporting Person*     Preiss Frederick						2. Issuer Name and Ticker or Trading Symbol AtriCure, Inc. [ ATRC ]									Check	all app	onship of Reportin Il applicable) Director Officer (give title		10% O	
(Last) (First) (Middle) 6033 SCHUMACHER PARK DRIVE						3. Date of Earliest Transaction (Month/Day/Year) 05/10/2009									X	belov				
(Street) WEST CHESTE	EST OH 45069				4. If	4. If Amendment, Date of Original Filed (Month/Day/Year)									Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person     Form filed by More than One Reporting Person					
(City)	(St	ate) (2	Zip)																	
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																				
1. Title of Security (Instr. 3)  2. Transac Date (Month/Date)						ur) E	2A. Deemed Execution Date, if any (Month/Day/Year)				Disposed	ities Acquired (A) d Of (D) (Instr. 3, 4			1 and Secur Benef Owne		cially I Following	Form (D) o	vnership n: Direct r Indirect nstr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
									Code	v	Amount		(A) or (D)	Price		Reported Transaction(s) (Instr. 3 and 4)				(111501.4)
Common Stock 05/10/2					10/2009						8,937(	1)	D	\$2.77		17,180			D	
	Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																			
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deeme Execution if any (Month/Da	Date,	4. Transactio Code (Inst		n of i		6. Date E Expiratio (Month/D	n Date		Amount of		ount	ıt			Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Ownership Form: Direct (D) or Indirect	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Codo	\ ,	1,00		Date		Expiration	Ti+1,	of	roo						

## **Explanation of Responses:**

1. Mr. Preiss has elected to transfer 8,937 shares to the Company to satisfy the tax withholding obligation incurred upon the vesting and release of shares previously acquired pursuant to a Restricted Stock Award.

/s/ Frederick C. Preiss

05/12/2009

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- \* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.