FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Check this box if no longer subject to
Section 16. Form 4 or Form 5
obligations may continue. See

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

	(3)				or	Section	n 30(h)	of the	Invest	ment	Company Act	of 1940				-			,
1. Name and Address of Reporting Person* <u>Discovery Group I, LLC</u>					2. Issuer Name and Ticker or Trading Symbol AtriCure, Inc. [ATRC]									Relationship of Reporting Person(s) to Issuer (Check all applicable) Director					
(Last) (First) (Middle) 191 N. WACKER DRIVE SUITE 1685					3. Date of Earliest Transaction (Month/Day/Year) 11/26/2012									Officer (give title Other (specify below) below)					
(Street) CHICAGO IL 60606			1	- 4. -								Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person X Form filed by More than One Reporting Person							
(City)	(51		Zip)	Non-Deriv	/ativ	e Sec	uritie	<u></u>	-auir	-d [Disposed o	of or F	Renefi	cially	, Owne	74			
1. Title of Security (Instr. 3)				2. Transaction Date (Month/Day/Year		2A. Deemed		te,	3. Transaction Code (Instr. 8)		4. Securities Acquir Disposed Of (D) (In:		quired (A) or		5. Amou Securiti Benefici Owned	nt of es ally Following	Form (D) or	nership : Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership
									Code	v	Amount	(A) or (D)	Price		Reported Transaction(s) (Instr. 3 and 4)				(Instr. 4)
Common Stock			11/26/2012					S		6,781(1)	D	\$7.16	14 ⁽²⁾	235	5,744		I	By Pleiades Investment Partners - D, L.P ⁽¹⁾	
Common Stock				11/27/2012					S		200(1)	D	\$7	7	1,792,559		I		By Pleiades Investment Partners - D, L.P ⁽¹⁾
Common	Stock			11/28/20)12				S		464 ⁽¹⁾	D	\$6.81	08 ⁽³⁾	1,79	2,095			By Pleiades Investment Partners - D, L.P
		Та	ble I								sposed of, , convertib				Owned				
1. Title of Derivative Security (Instr. 3)	tive Conversion Date ty or Exercise (Month/Day/Year) i		Executif any	Deemed 4. cution Date, Tra		saction (Instr.	5. Nu of Deriv Secu Acqu (A) or Dispo	5. Number		te Exe	ercisable and	7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)		8. Price of Derivative Security (Instr. 5)		9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	Ownersh Form: y Direct (D or Indire (I) (Instr.		Beneficial Ownership ct (Instr. 4)
					Code	v	(A)	(D)	Date Exerc	cisable	Expiration e Date	Title	Amoun or Numbe of Shares	r					
1. Name and Address of Reporting Person* <u>Discovery Group I, LLC</u>																			
(Last) (First) (Middle) 191 N. WACKER DRIVE SUITE 1685																			
						-													

(Street) **CHICAGO** 60606 IL(State) (City) (Zip) 1. Name and Address of Reporting Person^* **Donoghue Daniel J** (Last) (First) (Middle) C/O DISCOVERY GROUP I, LLC

191 N. WACKER DRIVE SUITE 1685									
(Street) CHICAGO	IL	60606							
(City)	(State)	(Zip)							
1. Name and Address of Reporting Person* Murphy Michael R									
(Last) (First) (Middle) C/O DISCOVERY GROUP I, LLC 191 N. WACKER DRIVE SUITE 1685									
(Street) CHICAGO	IL	60606							
(City)	(State)	(Zip)							

Explanation of Responses:

- 1. Discovery Group I, LLC is an investment manager for Pleiades Investment Partners D, L.P., which is a discretionary client of the reporting person, that owns the reported securities. The reporting person disclaims beneficial ownership of the reported securities except to the extent of its pecuniary interest therein.
- 2. This transaction was executed in multiple trades at prices ranging from \$7.14 \$7.21. The price reported above reflects the weighted average purchase price. The reporting person hereby undertakes to provide upon request to the SEC staff, the issuer or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected
- 3. This transaction was executed in multiple trades at prices ranging from \$6.80 \$6.85. The price reported above reflects the weighted average purchase price. The reporting person hereby undertakes to provide upon request to the SEC staff, the issuer or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected

Remarks

Michael R. Murphy and Daniel J. Donoghue are managing members of Discovery Group I, LLC, and each disclaims beneficial ownership of the reported securities except to the extent of his pecuniary interest therein.

Michael R. Murphy, Managing
Director

11/28/2012

 Daniel J. DOnoghue
 11/28/2012

 Michael R. Murphy
 11/28/2012

 ** 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.