

Blackey Brent G
Form 4
August 17, 2010

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
Blackey Brent G

2. Issuer Name and Ticker or Trading Symbol
Cardiovascular Systems Inc [CSII]

5. Relationship of Reporting Person(s) to Issuer
(Check all applicable)

(Last) (First) (Middle)
651 CAMPUS DRIVE
(Street)

3. Date of Earliest Transaction
(Month/Day/Year)
08/13/2010

Director 10% Owner
 Officer (give title below) Other (specify below)

ST. PAUL, MN 55112
(City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
Common Stock				(A) or (D) Price	17,203 ⁽¹⁾	D	

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

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

Explanation of Responses:

* 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).

(1) Number reflects correction of calculation error on prior form.

(2) Exercisable: 12,940 on 10/9/08, 10/9/09 and 10/9/10.

Each restricted stock unit represents the right to receive a payment from CSI equal in value to the market price per share of CSI common stock on the date of payment and shall be payable in cash beginning six months following the termination of each director's board membership.

(3) Each restricted stock unit represents the right to receive a payment from CSI equal in value to the market price per share of CSI common stock on the date of payment, and shall be payable in cash or shares of the Company's common stock beginning six months following the termination of each director's board membership; provided, however, that the restricted stock units vest in quarterly amounts of 5,435 on each of 9/30/2010, 12/31/2010, and 3/31/2011 and 5,434 on 6/30/2011.

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

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