

Kenny Kevin J
 Form 4
 August 15, 2012

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 *
 Kenny Kevin J

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)
 08/13/2012

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
 Exec. VP, Sales & Mtkg

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) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
| | | | Code | V | Amount or Price | | |
| Common Stock | 08/13/2012 | | A | | 5,911 (1) | A | \$ 0 90,232 D |
| Common Stock | 08/13/2012 | | A | | 5,911 (2) | A | \$ 0 96,143 D |
| Common Stock | 08/13/2012 | | A | | 11,820 (4) | A | \$ 0 107,963 D |
| Common Stock | 08/15/2012 | | S | | 259 (3) | D | \$ 8.9178 107,704 D |

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

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(9-02)

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. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of Derivative Securities Beneficially Owned (Instr. 5) |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|--|--|
|--|--|--------------------------------------|--|--------------------------------|---|--|---|--|--|

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|------------------------|-------|
| | Director | 10% Owner | Officer | Other |
| Kenny Kevin J 651 CAMPUS DRIVE ST. PAUL, MN 55112 | | | Exec. VP, Sales & Mtkg | |

Signatures

/s/ Scott J. Dorfman as Attorney-in-Fact for Kevin J. Kenny pursuant to Power of Attorney previously filed.

08/15/2012

__Signature of Reporting Person

Date

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) Subject to performance-based forfeiture based on total shareholder return for fiscal 2013 versus the Company's peer group.

(2) Subject to performance-based forfeiture based on annual revenue growth for fiscal 2013 versus the Company's peer group.

(3) The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$8.83 to \$9.00 inclusive. The reporting person undertakes to provide Cardiovascular Systems, Inc., any security holder of Cardiovascular Systems, Inc. or the staff of the Securities and Exchange Commission upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.

(4) Restrictions lapse over a three year period.

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

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