Koehn Paul A
Form 4
May 26, 2011

FORM 4

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

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

OMB APPROVAL

OMB Number:	3235-0287
Expires:	January 31, 2005
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).

(Print or Type Responses)

1. Name and Address of Reporting Person *
Koehn Paul A

(Last) (First) (Middle)

651 CAMPUS DRIVE

(Street)

ST. PAUL, MN 55112

(City) (State) (Zip)

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

3. Date of Earliest Transaction (Month/Day/Year)
05/24/2011

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

5. Relationship of Reporting Person(s) to Issuer
(Check all applicable)
_____ Director _____ 10% Owner
__X__ Officer (give title below) _____ Other (specify below)
VP of Manufacturing

6. Individual or Joint/Group Filing(Check Applicable Line)
_X_ 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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	05/24/2011		M(1)		8,088	A	$ 7.9	65,375 (2)	D	
Common Stock	05/24/2011		S(1)		8,088	D	$ 15	57,287	D	

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

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SEC 1474 (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 I S (
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	
Stock Option (right to buy)	$ 8.83							(3)	04/17/2017	Common Stock	35,585	
Stock Option (right to buy)	$ 8.83							(3)	04/17/2017	Common Stock	1,294	
Stock Option (right to buy)	$ 7.9	05/24/2011		M(1)			8,088	(3)	06/11/2017	Common Stock	8,087	
Stock Option (right to buy)	$ 7.9							(3)	10/08/2017	Common Stock	12,940	
Stock Option (right to buy)	$ 12.15							(3)	12/11/2017	Common Stock	32,350	
Stock Option (right to buy)	$ 8.75							(3)	03/01/2019	Common Stock	8,087	
Warrant	$ 8.83							02/25/2009	02/24/2014	Common Stock	940	

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other

Koehn Paul A
651 CAMPUS DRIVE
ST. PAUL, MN 55112

VP of Manufacturing

Signatures

/s/ John R. Remakel as Attorney-in-Fact for Paul Koehn pursuant to Power of Attorney previously filed. 05/26/2011

**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) The option exercise and sales of the underlying shares reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on August 12, 2010.

(2) Includes 1,066 shares acquired through Issuer's Employee Stock Purchase Plan on December 31, 2010.

(3) Fully exerciseable.

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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