

HART JOHN H  
 Form 4  
 September 23, 2010

**FORM 4** UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
 Washington, D.C. 20549

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).

**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 \*  
 HART JOHN H

2. Issuer Name and Ticker or Trading Symbol  
 COHERENT INC [COHR]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)

3. Date of Earliest Transaction (Month/Day/Year)  
 09/21/2010

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

P. O. BOX 54980

(Street)

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

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

SANTA CLARA, CA 95056-0980

(City) (State) (Zip)

**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)	
				(A) or (D)	Price			
				Code	V	Amount		
Common Stock	09/21/2010		M		16,500	A	\$ 19.06 23,000	D
Common Stock	09/21/2010		S		16,500	D	\$ 39.802 (1) 6,500	D
Common Stock	09/22/2010		M		6,000	A	\$ 15.21 12,500	D
Common Stock	09/22/2010		S		6,000	D	\$ 39.3088 (2) 6,500	D
Common Stock	09/23/2010		S		4,500	D	\$ 39.1766 2,000	D

(3)

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

**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 control number.**

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)	Amount or Number of Shares	
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	
Non Qualified Stock Option (right to buy)	\$ 19.06	09/21/2010		M	16,500	03/27/2006 04/01/2012	Common stock	16,500	
Non Qualified Stock Option (right to buy)	\$ 15.21	09/22/2010		M	6,000	03/31/2010 04/01/2012	Common Stock	6,000	

## Reporting Owners

Reporting Owner Name / Address

Relationships

Director 10% Owner Officer Other

HART JOHN H  
P. O. BOX 54980  
SANTA CLARA, CA 95056-0980

Former Director

## Signatures

/s/ Bret DiMarco, Pursuant to Power of Attorney

09/23/2010

\*\*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) Represents the weighted average sales price for the shares. The range of prices for such sales was \$39.664187 to \$39.91.

(2) Represents the weighted average sales price for the shares. The range of prices for such sales was \$39.10 to \$39.7006.

(3) Represents the weighted average sales price for the shares. The range of prices for such sales was \$39.15 to \$39.25.

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.