

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, 2015
 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)
 P. O. BOX 54980

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

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

(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)	
			Code	V	Amount	Price		
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

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.