

OMB APPROVAL	
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**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person * <u>SMITH ARTHUR D</u>  (Last) (First) (Middle) <u>C/O CIENA CORPORATION</u> <u>1201 WINTERSON ROAD</u>  (Street) <u>LINTHICUM, MD 21090</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>CIENA CORP [ CIEN ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Chief Operating Officer</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>12/18/2006</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

**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	12/18/2006		A		40,000 <sup>(1)</sup>	A	\$0	65,136	D	

**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 Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Non-Qualified Stock Option (right to buy)	\$27.88	12/18/2006		A		25,000		(2)	12/18/2016	Common Stock	25,000	\$0	25,000	D	

**Explanation of Responses:**

- Restricted Stock Units (RSUs) vest in their entirety on December 20, 2010, subject to acceleration upon the achievement of performance conditions set by the Compensation Committee.
- Stock option vests monthly in equal amounts over a four-year period.

By: Erik Lichter For: Arthur D. Smith, Ph.D. 12/20/2006

\*\* Signature of Reporting Person Date

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

\* 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).

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

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 Number.

POWER OF ATTORNEY

The undersigned hereby constitutes and appoints Russell B. Stevenson, Jr. and Erik Lichter, or his assignee, the undersigneds true and lawful attorney-in-fact to:

(1) execute for and on behalf of the undersigned Form ID, Forms 3, 4 and 5 in accordance with Section 16(a) of the Securities and Exchange Act of 1934 and the rules thereunder;

(2) do and perform any and all acts for an on behalf of the undersigned which may be necessary or desirable to complete the execution of any such Form ID, Forms 3, 4 or 5 and the timely filing of such form with the United States Securities and Exchange Commission, the Nasdaq Stock Market and any other authority; and

(3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform all and every act and thing whatsoever requisite, necessary and proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-facts substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorney-in-fact, in serving in such capacity at the request of the undersigned, is not assuming any of the undersigneds responsibilities to comply with Section 16 of the Securities Exchange Act of 1934. This Power of Attorney can only be revoked by delivering a signed, original 'Revocation of Power of Attorney' to the attorney-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 15th day of December, 2006.

Signature

Arthur D. Smith, Ph.D.