

Barker Steven
 Form 4
 February 18, 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 *
 Barker Steven

(Last) (First) (Middle)

C/O MASIMO CORPORATION, 40
 PARKER

(Street)

IRVINE, CA 92618

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 MASIMO CORP [MASI]

3. Date of Earliest Transaction
 (Month/Day/Year)
 02/11/2010

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

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

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 Beneficial Ownership (Instr. 4)
				(A) or (D)	Amount		
				Code	V		Price

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	2. Conversion or Exercise	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any	4. Transaction Code	5. Number of Derivative Securities	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Security (Instr. 3 and 4)
---------------------------------	---------------------------	--------------------------------------	-----------------------------------	---------------------	------------------------------------	--	---

Edgar Filing: Barker Steven - Form 4

(Instr. 3)	Price of Derivative Security	(Month/Day/Year)	(Instr. 8)	Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
	Non-qualified Stock Option (right to buy)	\$ 27.25	02/11/2010		A		20,000		(1)	02/11/2020	Common Stock	20,000

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Barker Steven C/O MASIMO CORPORATION, 40 PARKER IRVINE, CA 92618	X			

Signatures

/s/ Mark P. de Raad,
Attorney-in-Fact 02/18/2010

____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) This option was granted on February 11, 2010 and is exercisable as the option vests. This option vests over a five-year period, with 20% of the shares subject to the option vesting on each anniversary of the grant date.

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.