FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

| ı | OMB Number: 3 | 235-0287 |
|---|--------------------------|----------|
| | 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

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

| Name and Address of Reporting Person* | | | | | | 2. Issuer Name and Ticker or Trading Symbol MELA SCIENCES, INC. (NIV. [ACL. A.] | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | | |
|---|--|--|---|----------------------------------|---|---|------|--|------|-------------------|---|---|-------------------------|---|--|---|--|--|--|
| Steinhart Richard I | | | | | MELA SCIENCES, INC. /NY [MELA] | | | | | | | | | Directo | r | | 10% Ov | | |
| | | | | | Date of Earliest Transaction (Month/Day/Year) | | | | | | | | X | Officer below) | (give title | | Other (s below) | specify | |
| (Last) (First) (Middle) | | | | | | 05/14/2010 (Month/Day/Year) | | | | | | | Chief Financial Officer | | | | | | |
| C/O MELA SCIENCES, INC 50 SOUTH BUCKHOUT STREET, SUITE 1 | | | | | | | | | | | | | | | | | | | |
| JU JOUTH DUCKHOUT STREET, SUITE I | | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable | | | | | |
| (Street) | | | | , , , , , , | | | | | | | | Line) | | | | | | | |
| IRVINGTON NY 10533 | | 10533 | | | | | | | | | X | Form filed by One Reporting Person Form filed by More than One Reporting | | | | | | | |
| | | | | | | | | | | | | | Person | .ou 5)o | o | Cito i topo. | 9 | | |
| (City) | (S | tate) | (Zip) | | | | | | | | | | | | | | | | |
| | | Tak | ole I - Non-I | Derivati | ve Se | curitie | s Ac | quired, C | Disp | osed o | f, or Be | neficia | ally (| Owned | | | | | |
| Date | | | | . Transacti Date Month/Day | | 2A. Deemed Execution Date, if any (Month/Day/Yea | | , Transaction Dis Code (Instr. 5) | | Disposed | urities Acquired (A) sed Of (D) (Instr. 3, | | | 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 | • | | | | | | |
| | 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/Ye | Code (Instr. | | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | D | . Price of erivative ecurity nstr. 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 | e V | (A) | (D) | Date Exercisable | | xpiration ate | Title | Amount or Number of Shares | er | | | | | | |
| Stock Option | \$6.38 | 05/13/2010 | 05/13/2010 | A | | 16,500 | | 05/13/2011 ⁽¹ | 05 | 5/13/2020 | Common Stock | 16,50 | 0 | \$0.00 | 16,500 | | D | | |

Explanation of Responses:

1. Stock option grant dated May 13, 2010 will vest as follows: 1. 25% of the option grant shall be exercisable on each anniversary of the grant date for the first five consecutive years. 2. 75% of the option grant shall be exercisable upon placement of the first 200 MELAFind Systems.

Remarks:

/s/ Philip DeBellis as attorneyin-fact for Richard I. Steinhart

05/14/2010

** 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.