

| OMB APPROVAL | |
|---|-------------------|
| OMB Number: | 3235-0287 |
| Expires: | December 31, 2014 |
| 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, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

| | | |
|---|---|---|
| 1. Name and Address of Reporting Person* BERMAN RONALD J <hr/> (Last) (First) (Middle) 3006 LONGHORN BLVD #107 <hr/> (Street) AUSTIN TX 78578 <hr/> (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol Applied Nanotech Holdings, Inc [APNT] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below) |
| | 3. Date of Earliest Transaction (Month/Day/Year) 04/30/2012 | |
| 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 | | | | | | | | 400,511 | I | See Footnote (1) |

**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) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|---|-----|--|-----------------|---|----------------------------|--|--|--|--|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |
| Stock Option-Rt to Buy | (1) | | | | | | | (2) | (2) | Common Stock | 75,000 | | 75,000 | D | |
| Stock Option-Rt to Buy | \$ 0.23 | 04/30/2012 | | A | | 12,500 | | (3) | 04/30/2022 | Common Stock | 12,500 | \$ 0 | 87,500 | D | |

Explanation of Responses:

1. A total of 10,000 shares are owned by Mr. Berman's Pension Plan. A total of 187,719 shares are owned by Mr. Berman's spouse. The remaining 202,792 shares were owned by Mr. Berman but seized by Comerica Bank, via court order, as collateral for a loan in May 2011. No sales of those shares by Comerica have yet been reported to Mr. Berman.
2. Options issued at various dates, expiring in 2021 and 2022, at prices ranging from \$0.31 to \$0.40. All fully vested.
3. Quarterly grant of options to Outside Directors as compensation for serving as a Director. Fully vested at date of grant.

/s/ Donald T. Locke, as 05/02/2012
Attorney-in-Fact

** Signature of Reporting Date
Person

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.