

Ascent Solar Technologies, Inc.  
 Form 5  
 September 28, 2007

# FORM 5

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

OMB APPROVAL

OMB Number: 3235-0362  
 Expires: January 31, 2005  
 Estimated average burden hours per response... 1.0

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).  
 Form 3 Holdings Reported Form 4 Transactions Reported

**ANNUAL 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

|   |         |          |  |  |
|---|---------|----------|--|--|
| 1. Name and Address of Reporting Person * |         |          | 2. Issuer Name <b>and</b> Ticker or Trading Symbol           | 5. Relationship of Reporting Person(s) to Issuer   |
| PAULSON CAPITAL CORP                      |         |          | Ascent Solar Technologies, Inc.<br>[ASTI]                    | (Check all applicable)   |
| (Last)                                    | (First) | (Middle) | 3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) | <input type="checkbox"/> Director<br><input type="checkbox"/> Officer (give title below)<br><input checked="" type="checkbox"/> 10% Owner<br><input checked="" type="checkbox"/> Other (specify below) |
| 811 SW NAITO PARKWAY, SUITE 200           |         |          | 09/01/2007   | See Remarks  |
| (Street)                                  |         |          | 4. If Amendment, Date Original Filed(Month/Day/Year)         | 6. Individual or Joint/Group Reporting (check applicable line)   |
| PORTLAND, OR 97204                        |         |          |  | <input type="checkbox"/> Form Filed by One Reporting Person<br><input checked="" type="checkbox"/> 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 at end of Issuer's Fiscal Year (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|--|--|-----------------------------------|
|                                 |                                      |  |                                | (A) or (D) 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 2270 (9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative | 2. Conversion | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any | 4. Transaction | 5. Number | 6. Date Exercisable and Expiration Date | 7. Title and Amount of | 8. Price of Derivative | 9. of |
|------------------------|---------------|--------------------------------------|-----------------------------------|----------------|-----------|---|------------------------|------------------------|-------|
|------------------------|---------------|--------------------------------------|-----------------------------------|----------------|-----------|---|------------------------|------------------------|-------|

Edgar Filing: Ascent Solar Technologies, Inc. - Form 5

| Security (Instr. 3) | or Exercise Price of Derivative Security | any (Month/Day/Year) | Code (Instr. 8) | of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | (Month/Day/Year) | Underlying Securities (Instr. 3 and 4) | Security (Instr. 5) | D     |                            |
|---------------------|--|----------------------|-----------------|---|------------------|--|---------------------|-------|----------------------------|
|                     |  |                      |                 |   | (A) (D)          | Date Exercisable                       | Expiration Date     | Title | Amount or Number of Shares |

## Reporting Owners

| Reporting Owner Name / Address  | Relationships |           |         |             |
|---|---------------|-----------|---------|-------------|
|   | Director      | 10% Owner | Officer | Other       |
| PAULSON CAPITAL CORP<br>811 SW NAITO PARKWAY<br>SUITE 200<br>PORTLAND, OR 97204 | ^             | ^         | ^       | See Remarks |
| PAULSON CHESTER L F<br>811 SW NAITO PARKWAY<br>SUITE 200<br>PORTLAND, OR 97204  | ^             | ^         | ^       | See Remarks |
| PAULSON JACQUELINE M<br>811 SW NAITO PARKWAY<br>SUITE 200<br>PORTLAND, OR 97204 | ^             | ^         | ^       | See Remarks |

## Signatures

|  |            |
|--|------------|
| Harry L. Striplin, Attorney-in-Fact for Chester L.F. Paulson         | 09/28/2007 |
| **Signature of Reporting Person                                      | Date       |
| Harry L. Striplin, Authorized Agent for Paulson Capital Corp.        | 09/28/2007 |
| **Signature of Reporting Person                                      | Date       |
| Harry L. Striplin, Authorized Agent for Paulson Investment Co., Inc. | 09/28/2007 |
| **Signature of Reporting Person                                      | Date       |
| Harry L. Striplin, Authorized Agent for Paulson Family LLC           | 09/28/2007 |
| **Signature of Reporting Person                                      | Date       |
| Harry L. Striplin, Attorney-in-Fact for Jacqueline M. Paulson        | 09/28/2007 |
| **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).

^

### Remarks:

Form^ filed^ by^ more^ than^ one^ reporting^ person.^ ^ In^ addition^ to^ Paulson^ Capital^ Corp.^ ("PLCC"),^ th

Note: File three copies of this Form, one of which must be manually signed. If space provided 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.