

Ascent Solar Technologies, Inc.  
Form SC 13G  
September 10, 2008

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United States

Securities and Exchange Commission  
Washington, D.C. 20549

Schedule 13G  
Under the Securities Exchange Act of 1934  
(Amendment No. n/a )\*

OMB  
Number  
3235-0145

Ascent Solar Technologies, Inc.

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(Name of Issuer)

Common Stock

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(Title of Class of Securities)

043635101

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(CUSIP Number)

August 31, 2008

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(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

<input type="checkbox"/>	Rule 13d-1(b)
<input type="checkbox"/>	Rule 13d-1(c)
<input checked="" type="checkbox"/>	Rule 13d-1(d)

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No.

1. Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only).  
PAULSON CAPITAL CORP  
93-0589534
2. Check the Appropriate Box if a Member of a Group (See Instructions)
  - a.
  - b.
3. SEC Use Only
4. Citizenship or Place of Organization  
United States of America
5. Sole Voting Power  
Number of Shares Beneficially Owned by Each Reporting Person With: 0
6. Shared Voting Power  
650,000
7. Sole Dispositive Power  
0
8. Shared Dispositive Power  
650,000
9. Aggregate Amount Beneficially Owned by Each Reporting Person  
650,000
10. Check if the Aggregate Amount in Row 9 Excludes Certain Shares (See Instructions)
11. Percent of Class Represented by Amount in Row 9  
3.4215
12. Type of Reporting Person (See Instructions)  
CO BD

Footnotes:

Paulson Capital Corp. ("PLCC") wholly owns Paulson Investment Company, Inc. ("PICI"). PLCC is a corporation and PICI is a broker-dealer.

CUSIP No.

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Chester L.F. Paulson and Jacqueline M. Paulson as Joint Tenants

2. Check the Appropriate Box if a Member of a Group (See Instructions)

a.

b.

3. SEC Use Only

4. Citizenship or Place of Organization

United States of America

Number of  
Shares  
Beneficially

5. Sole Voting Power

0

Owned by Each

Reporting Person

6. Shared Voting Power

650,000

With:

7. Sole Dispositive Power

0

8. Shared Dispositive Power

650,000

9. Aggregate Amount Beneficially Owned by Each Reporting Person

650,000

10. Check if the Aggregate Amount in Row 9 Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row 9

3.4214

12. Type of Reporting Person (See Instructions)

IN

Footnotes:

Chester L.F. and Jacqueline M. Paulson (together the "Paulsons") may be deemed to control Paulson Capital Corp. ("PLCC"), which wholly owns Paulson Investment Company, Inc. ("PICI"). The Paulson control and are the managing partners of the Paulson Family LLC ("LLC") which is a controlling shareholder of PLCC, which is the parent company for PICI.

Item 1.

a. Name of Issuer

Ascent Solar Technologies, Inc.

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b. Address of Issuer's Principal Executive Offices

8120 Shaffer Parkway  
Littleton, CO 80127

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Item 2.

a. Name of Person Filing

This statement is being filed jointly by each of the following persons pursuant to Rule 13d-1(k) promulgated by the Securities and Exchange Commission under Section 13 of the Securities Exchange Act of 1934, as amended: (i) Chester L.F. Paulson and Jacqueline M. Paulson, as joint tenants and each individually (together, the "Paulsons") who control and are the managing partners of the Paulson Family LLC ("LLC"); and (ii) Paulson Capital Corporation ("PLCC"), an Oregon corporation, which directly wholly owns Paulson Investment Company, Inc. ("PICI"), an Oregon corporation. The Paulsons and PLCC are collectively referred to as the "Reporting Persons". The Reporting Persons schedule 13G Joint Filing Agreement is attached as Exhibit 1.

Information with respect to the Reporting Persons is given solely by such Reporting Persons, and no Reporting Person assumes responsibility for the accuracy or completeness of the information by another Reporting Person, except as otherwise provided in Rule 13d-1(k). By their signature on this statement, each of the Reporting Persons agree that this statement is filed on behalf of such Reporting Persons.

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b. Address of Principal Business Office or, if None, Residence

The Paulsons, PLCC's, and PICI's principal business address is:

811 SW Naito Parkway, Suite 200  
Portland, OR 97204

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c. Citizenship

The Paulsons are citizens of the United States of America, and PLCC and PICI are organized under the laws of the United States of America.

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d. Title of Class of Securities  
Common Stock for Ascent Solar Technologies, Inc.

e. CUSIP Number

043635101

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Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- a.  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
  - b.  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
  - c.  Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
  - d.  Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
  - e.  An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
  - f.  An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
  - g.  A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
  - h.  A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
  - i.  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
  - j.  Group, in accordance with §240.13d-1(b)(1)(ii)(J).
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Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

a. Amount beneficially owned:

The Paulsons may be deemed to be the beneficial owners of a total of 650,000 shares of Issuer Common Stock. The precise owners of these shares is described more specifically in this paragraph. The Paulson may be deemed to control Paulson Capital Corp. ("PLCC"), which wholly owns Paulson Investment Company, Inc. ("PICI"). The Paulsons control and are the managing partners of the Paulson Family LLC ("LLC"). Chester Paulson directly owns 0 shares of Issuer Common Stock. Jacqueline M. Paulson directly owns 0 shares of Issuer Common Stock. The Paulsons may be deemed to indirectly own 82,500 shares of Issuer Common Stock, 117,500 shares of Issuer Warrants, and Underwriter Warrants exercisable into 450,000 shares of Issuer Common Stock through PICI. Pursuant to SEC Rule 13d-4, the Paulsons expressly disclaim beneficial ownership of the 82,500 shares of Issuer Common Stock, 117,500 shares of Issuer Warrants, and Underwriter Warrants exercisable into 450,000 shares of Issuer Common Stock of which PICI is record owner.

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b. Percent of class:

As of August 5, 2008, the Issuer had 18,430,102 shares of Issuer Common Stock issued and outstanding, as reported in their 10-Q filed August 8, 2008 (the "Issuer Outstanding Shares"). The Paulsons actual and deemed beneficial ownership of Issuer Common Stock represented approximately 3.4215% of the Issuer Outstanding Shares. PLCC's indirect beneficial ownership of Issuer Common Stock represented approximately 3.4215% of the Issuer Outstanding Shares.

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c. Number of shares as to which the person has:

i. Sole power to vote or to direct the vote:

The Paulsons have sole power to vote or direct the vote of 0 shares. PLCC has sole power to vote or direct the vote of 0 shares.

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ii. Shared power to vote or to direct the vote:

The Paulsons have shared power to vote or direct the vote of 650,000 shares. PLCC has shared power to vote or direct the vote of 650,000 shares.

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iii. Sole power to dispose or to direct the disposition of:

The Paulsons have sole power to dispose or direct the disposition of 0 shares. PLCC has sole power to dispose or direct the disposition of 0 shares.

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- iv. Shared power to dispose or to direct the disposition of:

The Paulsons have shared power to dispose or direct the disposition of 650,000 shares. PLCC has shared power to dispose or direct the disposition of 650,000 shares.

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Instruction. For computations regarding securities which represent a right to acquire an underlying security see §240.13d-3(d)(1).

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Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following x

Instruction: Dissolution of a group requires a response to this item.

N/A

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Item 6. Ownership of More than Five Percent on Behalf of Another Person.

The following shall be filed as exhibits: copies of written agreements relating to the filing of joint acquisition statements as required by §240.13d-1(k) and copies of all written agreements, contracts, arrangements, understandings, plans or proposals relating to: (1) the borrowing of funds to finance the acquisition as disclosed in Item 3; (2) the acquisition of issuer control, liquidation, sale of assets, merger, or change in business or corporate structure or any other matter as disclosed in Item 4; and (3) the transfer or voting of the securities, finder's fees, joint ventures, options, puts, calls, guarantees of loans, guarantees against loss or of profit, or the giving or withholding of any proxy as disclosed in Item 6.

N/A

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Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company

If a parent holding company has filed this schedule, pursuant to Rule 13d-1(b)(ii)(G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company has filed this schedule pursuant to Rule 13d-1(c) or Rule 13d-1(d), attach an exhibit stating the identification of the relevant subsidiary.

See Item 4(a).

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Item 8. Identification and Classification of Members of the Group

If a group has filed this schedule pursuant to §240.13d-1(b)(1)(ii)(J), so indicate under Item 3(j) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to §240.13d-1(c) or §240.13d-1(d), attach an exhibit stating the identity of each member of the group.

N/A

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Item 9. Notice of Dissolution of Group

Notice of dissolution of a group may be furnished as an exhibit stating the date of the dissolution and that all further filings with respect to transactions in the security reported on will be filed, if required, by members of the group, in their individual capacity. See Item 5.

N/A

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Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 08, 2008

Date

/s/ Chester L.F. Paulson

Signature

Chester L.F. Paulson

Individually

Name / Title

/s/ Jacqueline M.

Paulson

Signature

Jacqueline M. Paulson

Individually

Name / Title

/s/ Chester L.F. Paulson

Signature

Chairman of the Board

Paulson Capital Corp.

Name / Title

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties for whom copies are to be sent.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)

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