Ascent Solar Technologies, Inc. Form SC 13G February 02, 2007

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

SCHEDULE 13G Under the Securities Exchange Act of 1934

ASCENT SOLAR TECHNOLOGIES, INC.

(Name of Issuer)

COMMON STOCK, PAR VALUE \$0.0001 PER SHARE

(Title of Class of Securities)

043635101

(CUSIP Number)

DECEMBER 31, 2006

(Date of event which requires filing of this statement)

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

þ Rule 13d-1(b)

o Rule 13d-1(c)

o 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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11
NAME OF REPORTING PERSONS.
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY).
Millenco, L.L.C.
13-3532932
CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(b) þ
SEC USE ONLY
CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware
                                              NUMBER OF
                                                SHARES
                                             BENEFICIALLY
                                               OWNED BY
                                                 EACH
                                               REPORTING
                                              PERSON WITH
SOLE VOTING POWER
399,300
SHARED VOTING POWER
-0-
SOLE DISPOSITIVE POWER
399,300
SHARED DISPOSITIVE POWER
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
399,300
10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
o11
```

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

7.1%

12TYPE OF REPORTING PERSON

OO, BD

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043635101
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of
11
NAME OF REPORTING PERSONS.
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY).
Millennium Management, L.L.C.
13-3804139
CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(b) þ
SEC USE ONLY
CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware
                                               NUMBER OF
                                                 SHARES
                                              BENEFICIALLY
                                               OWNED BY
                                                  EACH
                                               REPORTING
                                              PERSON WITH
SOLE VOTING POWER
399,300
SHARED VOTING POWER
-0-
SOLE DISPOSITIVE POWER
399,300
SHARED DISPOSITIVE POWER
-0-
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
399,300
10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
o11
```

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

7.1%

12TYPE OF REPORTING PERSON

00

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NAME OF REPORTING PERSONS.
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY).
Israel A. Englander
CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(a) o
(b) þ
SEC USE ONLY
CITIZENSHIP OR PLACE OF ORGANIZATION
United States
                                               NUMBER OF
                                                 SHARES
                                              BENEFICIALLY
                                               OWNED BY
                                                  EACH
                                               REPORTING
                                              PERSON WITH
SOLE VOTING POWER
399,300
SHARED VOTING POWER
-0-
SOLE DISPOSITIVE POWER
399,300
SHARED DISPOSITIVE POWER
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
399,300
10
CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
11
```

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
7.1%
12
TYPE OF REPORTING PERSON

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<u>Item 1</u>
(a) <u>Name of Issuer</u> :
Ascent Solar Technologies, Inc., a Delaware corporation (the "Company").
(b) Address of Issuer s Principal Executive Offices:
8120 Shaffer Parkway Littleton, Colorado 80127
Item 2 (a)Name of Person Filing: Item 2 (b)Address of Principal Business Office: Item 2 (c)Citizenship:

Millennium Management, L.L.C. 666 Fifth Avenue New York, New York 10103 Citizenship: Delaware

c/o Millennium Management, L.L.C.

New York, New York 10103 Citizenship: Delaware

Millenco, L.L.C.

666 Fifth Avenue

Israel A. Englander c/o Millennium Management, L.L.C. 666 Fifth Avenue New York, New York 10103 Citizenship: United States

(d)<u>Title of Class of Securities</u>:Common Stock, par value \$0.0001 per share ("Common Stock")

(e)<u>CUSIP Number:</u> 043635101

Item 3 If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b), check whether the person filing is a:

- (a) b Broker or dealer registered under section 15 of the Act (15 U.S.C. 780);
- (b) o Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c) o Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d) o Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e) o An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) o An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) \flat A parent holding company or control person in accordance with $\S240.13d-1(b)(1)(ii)(G)$;

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(h) o A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);	
(i) o A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the In 1940 (15 U.S.C. 80a-3);	ivestment Company Act of

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

(j) o Group, in accordance with §240.13d-1(b)(1)(ii)(J).

As of the date of this filing, each Reporting Person may be deemed to be the beneficial owner of the following:

- (i) 99,300 shares of Common Stock owned by Millenco, L.L.C., a Delaware limited liability company ("Millenco"), formerly known as Millenco, L.P., a Delaware limited partnership;
- (ii) 100,000 Class A Warrants ("Class A Warrant") owned by Millenco. Each Class A Warrant entitles the holder to purchase one share of the Company s Common Stock at a price of \$6.60. Each Class A Warrant became exercisable on August 10, 2006 and will expire on July 10, 2011. Beginning on January 6, 2007, the Company has the right to redeem the Class A Warrants at a redemption price of \$0.25 per Class A Warrant. The redemption right arises only if the last reported sale price of the Company s Common Stock equals or exceeds \$9.35 for the five consecutive trading days ending prior to the notice of redemption. The Company is required to provide 30 days prior written notice to the Class A Warrant holders of the Company s intention to redeem the Class A Warrants; and
- (iii) 200,000 Class B Warrants ("Class B Warrant") owned by Millenco. Each Class B Warrant entitles the holder to purchase one share of the Company s Common Stock at a price of \$11.00. Each Class B Warrant became exercisable on August 10, 2006, and will expire on July 10, 2011. The Company does not have the right to redeem the Class B Warrants.

Millenco is a broker-dealer and a member of the American Stock Exchange and the NASDAQ.

Millennium Management, L.L.C., a Delaware limited liability company ("Millennium Management"), is the manager of Millenco, and consequently may be deemed to have voting control and investment discretion over securities owned by Millenco. Israel A. Englander ("Mr. Englander") is the managing member of Millennium Management. As a result, Mr. Englander may be deemed to be the beneficial owner of any shares deemed to be beneficially owned by Millennium Management. The foregoing should not be construed in and of itself as an admission by Millennium Management or Mr. Englander as to beneficial ownership of the shares owned by Millenco.

Note: Integrated Holding Group, L.P., a Delaware limited partnership ("Integrated Holding Group"), is a non-managing member of Millenco. As a non-managing member, Integrated Holding Group has no investment or voting control over Millenco or its securities positions.

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(b) Percent of Class
7.1% of the Company s Common Stock (see Item 4(a) above), which percentage was calculated based on 5,298,894 shares of Common Stock outstanding as of October 24, 2006 as reported in the Company s Quarterly Report on Form 10-QSB, dated as October 24, 2006.
(c) Number of shares as to which such person has:
(i) Sole power to vote or to direct the vote
399,300
(ii) Shared power to vote or to direct the vote
-0-
(iii) Sole power to dispose or to direct the disposition of
399,300
(iv) Shared power to dispose or to direct the disposition of
-0-
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 \circ .
Item 6. Ownership of More than Five Percent on Behalf of Another Person.
Not applicable.
Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.
Not applicable.
Item 8. Identification and Classification of Members of the Group

See Exhibit I.

Item 9. Notice of Dissolution of Group

Not applicable.

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Item 10. Certification	

By signing below each of the undersigned certifies that, to the best of its knowledge and belief, the securities referred to above 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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9 of 11 Exhibits:		
Exhibit I: Joint Filing Agreement d	ated as of February 1, 2007, by and among Millengo, L.I. C. Miller	nnium Managamant I I C and Israel A

Englander.

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SIGNATURE
After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information with respect to it set forth in this statement is true, complete, and correct.
Dated: February 1, 2007
MILLENCO, L.L.C.
By: Millennium Management, L.L.C. as manager
By: /s/ Robert Williams Name: Robert Williams Title: Chief Financial Officer
MILLENNIUM MANAGEMENT, L.L.C.
By: /s/ Robert Williams Name: Robert Williams Title: Chief Financial Officer
/s/ Israel A. Englander by David Nolan pursuant to Power of Attorney filed with the SEC on June 6, 2005 Israel A. Englander

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EXHIBIT I JOINT FILING AGREEMENT This will confirm the agreement by and among the undersigned that the Schedule 13G filed with the Securities and Exchange Commission on or about the date hereof with respect to the beneficial ownership by the undersigned of the shares of Common Stock, par value \$0.0001 per share of Ascent Solar Technologies, Inc., a Delaware Corporation, is being filed, and all amendments thereto will be filed, on behalf of each of the persons and entities named below in accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
Dated: February 1, 2007
MILLENCO, L.L.C.
By: Millennium Management, L.L.C. as manager
By: <u>/s/ Robert Williams</u> Name: Robert Williams Title: Chief Financial Officer
MILLENNIUM MANAGEMENT, L.L.C.
By: <u>/s/ Robert Williams</u> Name: Robert Williams Title: Chief Financial Officer

/s/ Israel A. Englander by David Nolan pursuant to Power of Attorney filed with

the SEC on June 6, 2005 Israel A. Englander

CUSIP No.

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