

Ascent Solar Technologies, Inc.

Form 3

September 18, 2007

FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION**Washington, D.C. 20549**

OMB APPROVAL

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INITIAL STATEMENT OF 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

(Print or Type Responses)

1. Name and Address of Reporting Person *

Â Quercus Trust

(Last)

(First)

(Middle)

2. Date of Event Requiring Statement

(Month/Day/Year)

09/13/2007

3. Issuer Name and Ticker or Trading Symbol

Ascent Solar Technologies, Inc. [ASTI]

4. Relationship of Reporting Person(s) to Issuer

5. If Amendment, Date Original Filed(Month/Day/Year)

(Check all applicable)

____ Director ☒ 10% Owner
____ Officer ____ Other
(give title below) (specify below)

6. Individual or Joint/Group

Filing(Check Applicable Line)

____ Form filed by One Reporting Person

X Form filed by More than One Reporting Person

2309 SANTIAGO DR.

(Street)

NEWPORT

BEACH,,Â CAÂ 92660

(City)

(State)

(Zip)

Table I - Non-Derivative Securities Beneficially Owned1. Title of Security
(Instr. 4)2. Amount of Securities Beneficially Owned
(Instr. 4)3. Ownership Form:
Direct (D)
or Indirect (I)
(Instr. 5)4. Nature of Indirect Beneficial Ownership
(Instr. 5)

Common Stock

1,123,146

D

Â

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

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.

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)1. Title of Derivative Security
(Instr. 4)2. Date Exercisable and Expiration Date
(Month/Day/Year)

Date Exercisable

Expiration Date

3. Title and Amount of Securities Underlying Derivative Security
(Instr. 4)

Title

Amount or Number of

4. Conversion or Exercise Price of Derivative Security

5. Ownership Form of Derivative Security:
Direct (D)
or Indirect6. Nature of Indirect Beneficial Ownership
(Instr. 5)

Shares

(I)
(Instr. 5)

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Quercus Trust 2309 SANTIAGO DR. NEWPORT BEACH,, CA 92660	Â	Â X	Â	Â
Gelbaum David 2309 SANTIAGO DR. NEWPORT BEACH,, CA 92660	Â	Â X	Â	Co-Trustee
Gelbaum Monica Chavez 2309 SANTIAGO DR. NEWPORT BEACH,, CA 92660	Â	Â X	Â	Co-Trustee

Signatures

/s/ David Gelbaum, Co-Trustee, The Quercus Trust

09/18/2007

__Signature of Reporting Person

Date

/s/ David Gelbaum, as attorney-in-fact for Monica Chavez Gelbaum, Co-Trustee, The Quercus Trust

09/18/2007

__Signature of Reporting Person

Date

Explanation of Responses:

* If the form is filed by more than one reporting person, *see* Instruction 5(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.

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