Eller Ron Form 4 April 01, 2010

FORM 4

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

SECURITIES

OMB Number:

3235-0287

Expires:

January 31, 2005

0.5

Estimated average burden hours per

OMB APPROVAL

response...

if no longer subject to Section 16. Form 4 or Form 5 obligations

may continue.

See Instruction

Check this box

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(b).

(Print or Type Responses)

1. Name and Address of Reporting Person * Eller Ron

2. Issuer Name and Ticker or Trading Symbol

5. Relationship of Reporting Person(s) to

Issuer

Ascent Solar Technologies, Inc.

(Check all applicable)

[ASTI]

(Middle)

(Zip)

(Last) (First) 3. Date of Earliest Transaction

X_ Director Officer (give title

10% Owner Other (specify

C/O ASCENT SOLAR TECHNOLOGIES, INC., 12300

(Street)

(State)

GRANT STREET

(City)

Security

(Instr. 3)

Stock

Stock

Common

4. If Amendment, Date Original

6. Individual or Joint/Group Filing(Check

Applicable Line)

Filed(Month/Day/Year)

(Month/Day/Year)

03/31/2010

X Form filed by One Reporting Person Form filed by More than One Reporting

THORNTON, CO 80241

1.Title of 2. Transaction Date 2A. Deemed (Month/Day/Year) Execution Date, if

3. 4. Securities Acquired 5. Amount of Transaction(A) or Disposed of Code (D) (Instr. 8) (Instr. 3, 4 and 5)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 6. Ownership 7. Nature of Form: Direct Indirect Securities Beneficially (D) or Beneficial Owned Indirect (I) Ownership Following (Instr. 4) (Instr. 4)

D

D

(A)

Reported Transaction(s) (Instr. 3 and 4)

Code V (D) Price Amount Common 03/31/2010 M 3,113 Α (1)

(Month/Day/Year)

7,055 $S^{(2)}$ 04/01/2010 1,600 5,455

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 1474 (9-02)

1

Edgar Filing: Eller Ron - Form 4

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)	Code	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)		Underlying Securities		8. Pr Deriv Secu (Instr
			Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	
Restricted Stock Units	(1)	03/31/2010	M	3,113	<u>(1)</u>	<u>(1)</u>	Common Stock	3,113	\$

Reporting Owners

Reporting Owner Name / Address	Relationships					
Reporting Owner Faunt (1)	Director	10% Owner	Officer	Other		
Eller Ron C/O ASCENT SOLAR TECHNOLOGIES, INC. 12300 GRANT STREET THORNTON, CO 80241	X					

Signatures

David C. Wang, as attorney-in-fact for Ron
Eller

**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).
- (1) These restricted stock units vest quarterly in 2010. Each restricted stock unit represents a contingent right to receive one share of the Issuer's common stock.
- (2) This transaction was effected pursuant to Rule 10b5-1 trading plan adopted by the reporting person on January 13, 2010.
- (3) In addition to the restricted stock units, Mr. Eller holds 1,500 Class B warrants that are immediately exercisable.

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

Reporting Owners 2