

Rakes Zane
 Form 3
 January 14, 2010

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 Rakes Zane (Last) (First) (Middle)	2. Date of Event Requiring Statement (Month/Day/Year) 01/04/2010	3. Issuer Name and Ticker or Trading Symbol Ascent Solar Technologies, Inc. [ASTI]	4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer <input type="checkbox"/> Other (give title below) (specify below) VP of Manufacturing	5. If Amendment, Date Original Filed(Month/Day/Year)
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C/O ASCENT SOLAR TECHNOLOGIES, INC., Â 12300 GRANT STREET
 (Street)

THORNTON, Â CO Â 80241
 (City) (State) (Zip)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. 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)
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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)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
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				Shares		or Indirect (I) (Instr. 5)	
Common Stock Option (Right to Buy)	⌘ (1)	01/04/2020	Common Stock	10,000	\$ 5.39	D	⌘

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Rakes Zane C/O ASCENT SOLAR TECHNOLOGIES, INC. 12300 GRANT STREET THORNTON, ⌘ CO ⌘ 80241	⌘	⌘	⌘ VP of Manufacturing	⌘

Signatures

Zane Rakes 01/13/2010
 __Signature of Date
 Reporting Person

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).
- (1) The stock option vests in the following amounts on the following dates: 25% on January 4, 2011; 25% on January 4, 2012; 25% on January 4, 2013; and 25% on January 4, 2014.

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.