BIAO XU Form 3 April 17, 2012

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

January 31, 2005

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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 2. Date of Event Requiring 3. Issuer Name and Ticker or Trading Symbol Person * Statement Ascent Solar Technologies, Inc. [ASTI] BIAO XU (Month/Day/Year) 04/16/2012 (Last) (First) (Middle) 4. Relationship of Reporting 5. If Amendment, Date Original Person(s) to Issuer Filed(Month/Day/Year) 12300 GRANT STREET (Check all applicable) (Street) 6. Individual or Joint/Group Filing(Check Applicable Line) _X__ Director 10% Owner _X_ Form filed by One Reporting Officer _ Other Person THORNTON, COÂ 80241 (give title below) (specify below) Form filed by More than One Reporting Person (City) (State) (Zip) Table I - Non-Derivative Securities Beneficially Owned 2. Amount of Securities 4. Nature of Indirect Beneficial 1. Title of Security Beneficially Owned Ownership (Instr. 4) Ownership (Instr. 4) Form: (Instr. 5) Direct (D) or Indirect (I) (Instr. 5) D Â No securities are beneficially owned (1)0 Reminder: Report on a separate line for each class of securities beneficially SEC 1473 (7-02) 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

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

currently valid OMB control number.

(Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		Securities Underlying Derivative Security		Conversion or Exercise	Ownership Form of	(Instr. 5)
			(Instr. 4)		Price of	Derivative	
		Expiration Date	Title	Amount or Number of	Derivative Security	Security: Direct (D) or Indirect	

Shares

(I) (Instr. 5)

Reporting Owners

THORNTON, COÂ 80241

Reporting Owner Name / Address

Director 10% Owner Officer Other

BIAO XU

12300 GRANT STREET Â X Â Â Â

Signatures

/s/ James H. Carroll, Attorney-in-Fact 04/17/2012

**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).
- Does not include shares held by TFG Radiant Investment Group Ltd. ("TFG Radiant"), which is the Issuer's largest stockholder. Mr. Xu is an investor in TFG Radiant and disclaims beneficial ownership of shares held by TFG Radiant (except to the extent of his pecuniary interest therein).

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Remarks:

Xu Biao (aka Winston Xu) is a Board designee of TFG Radiant pursuant to the Amended and R 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.

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