Ascent Solar Technologies, Inc.

Form 4

August 16, 2007

FORM 4

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

OMB Number: 3235-0287

OMB APPROVAL

Expires: January 31, 2005

Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5

SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,

obligations may continue.

See Instruction

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, 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 * Misra Ashutosh			2. Issuer Name and Ticker or Trading Symbol Ascent Solar Technologies, Inc. [ASTI]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)			
(Last) C/O ASCEN TECHNOLO SHAFFER F	OGIES, INC	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 08/14/2007	Director 10% Owner Sylvantial Other (specify below) Sylvantial Sylva			
	(Street)	_	4. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting			
I ITTI FTON	V CO 80127	/		rom med by more than one reporting			

Person

LITTLETON, CO 80127

(City)	(State) (Z	(Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned								
1.Title of Security (Instr. 3)	2. Transaction Date 2A. Deemed (Month/Day/Year) Execution Date, if any (Month/Day/Year)		3. Transaction Code (Instr. 8)	4. Securities Acquired on(A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
			Code V	Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)			
Common Stock	08/14/2007		S <u>(1)</u>	400	D	\$ 7.43	55,600 (2)	D		
Common Stock	08/14/2007		S(1)	100	D	\$ 7.44	55,500 (2)	D		
Common Stock	08/14/2007		S(1)	200	D	\$ 7.45	55,300 (2)	D		
Common Stock	08/14/2007		S(1)	500	D	\$ 7.46	54,800 (2)	D		
	08/14/2007		S(1)	800	D	\$ 7.5	54,000 (2)	D		

Common Stock							
Common Stock	08/14/2007	S <u>(1)</u>	100	D	\$ 7.51	53,900 (2)	D
Common Stock	08/14/2007	S(1)	100	D	\$ 7.52	53,800 (2)	D
Common Stock	08/14/2007	S(1)	215	D	\$ 7.53	53,585 (2)	D
Common Stock	08/14/2007	S(1)	400	D	\$ 7.54	53,185 (2)	D
Common Stock	08/14/2007	S(1)	285	D	\$ 7.55	52,900 (2)	D
Common Stock	08/14/2007	S <u>(1)</u>	400	D	\$ 7.56	52,500 (2)	D
Common Stock	08/14/2007	S <u>(1)</u>	100	D	\$ 7.62	52,400 (2)	D
Common Stock	08/14/2007	S <u>(1)</u>	100	D	\$ 7.63	52,300 (2)	D

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

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SEC 1474 (9-02)

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

1. Title of	2.	3. Transaction Date	3A. Deemed	4.	5.	6. Date Exerc	isable and	7. Titl	e and	8. Price of
Derivative	Conversion	(Month/Day/Year)	Execution Date, if	Transacti	onNumber	Expiration Da	ate	Amou	int of	Derivative
Security	or Exercise		any	Code	of	(Month/Day/	Year)	Under	lying	Security
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)	Derivative	e		Securi	ities	(Instr. 5)
	Derivative				Securities			(Instr.	3 and 4)	
	Security				Acquired					
	•				(A) or					
					Disposed					
					of (D)					
					(Instr. 3,					
					4, and 5)					
									Amount	
						Date	Expiration		or	
							Date		Number	
						Exercisable	Dute		of	
				Code V	(A) (D)				Shares	

9. Nu Deriv Secur Bene Own Follo Repo Trans (Instr

Reporting Owners

Reporting Owner Name / Address Relationships

Director 10% Owner Officer

Misra Ashutosh C/O ASCENT SOLAR TECHNOLOGIES, INC. 8120 SHAFFER PARKWAY LITTLETON, CO 80127

SVP Operations & Corp. Affairs

Other

Signatures

David C. Wang, as attorney-in-fact for Ashutosh Misra

08/16/2007

**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) The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on June 22, 2007.
- (2) Mr. Misra also holds the following securities: 4,000 Class B Warrants; vested options to purchase 24,000 shares of common stock; and unvested options to purchase 10,000 shares of common stock.

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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