Ascent Solar Technologies, Inc. Form SC 13D/A September 11, 2007

CUSIP No. 043635101

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

SCHEDULE 13D

(Amendment No. 1)

UNDER THE SECURITIES EXCHANGE ACT OF 1934

Ascent Solar Technologies, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001

(Title of Class of Securities)

043635101

(CUSIP Number)

Joseph P. Bartlett, Esq.

Greenberg Glusker Fields Claman & Machtinger LLP
1900 Avenue of the Stars, Suite 2100
Los Angeles, CA 90067
(310) 201-7481

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

September 04, 2007 (Date of Event which Requires Filing of this Statement)

If the reporting person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Sections 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box / /.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7 (b) for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1. Name of Reporting Persons. I.R.S. Identification Nos. of ab			ring Persons. Fication Nos. of above persons (entities only).				
	David Gelbaum, Trustee, The Quercus Trust						
2.	Check the Appropriate Box If a Member of a Group (See Instructions) (a) [X] (b) [_]						
3.	SEC Use Only						
4.	Source of Funds (See Instructions) PF						
5.	Check If Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) [_]						
6.	Citizenship or Place of Organization U.S.						
NUMBER OF		7.	Sole Voting Power				
SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		8.	Shared Voting Power 967,599				
		9.	Sole Dispositive Power -0-				
	v T T 11	10.	Shared Dispositive Power 967,599				
11.	. Aggregate Amount Beneficially Owned by Each Reporting Person 967,599						
12.	Check Box If the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)						
13.	Percent of Class Represented by Amount in Row (11) 8.8%(1)						
14.	Type of Reporting Person (See Instructions) IN						
/1\	Dog and a second	11 (100 602 shares of Common Stock was relies 60 0001 was above				
(1) Based on 11,009,602 shares of Common Stock, par value \$0.0001 per as reported in the Issuer's Quarterly Report on Form 10-QSB for the quarter period ended June 30, 2007 and Current Report on Form 8K of August 16, 2007.							
			2				

1. Name of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

	Monica Chavez Gelbaum, Trustee, The Quercus Trust					
2.	Check the Appropriate Box If a Member of a Group (See Instructions) (a) [X] (b) [_]					
3.	SEC Use Only					
4.	Source of Funds (See Instructions) PF					
5.	Check If Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) [_]					
6.	Citizenship or Place of Organization U.S.					
NUMBER OF		7.	Sole Voting Power			
BENE	HARES FICIALLY ED BY	8.	Shared Voting Power 967,599			
RE P	EACH PORTING ERSON	9.	Sole Dispositive Power			
	WITH	10.	Shared Dispositive Power 967,599			
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 967,599					
12.	Check Box If the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)					
13.	Percent of Class Represented by Amount in Row (11) 8.8%(1)					
14.	. Type of Reporting Person (See Instructions) IN					
(1)	Based on 11,009,602 shares of Common Stock, par value \$0.0001 per share, as reported in the Issuer's Quarterly Report on Form 10-QSB for the quarter period ended June 30, 2007 and Current Report on Form 8K dated August 16, 2007.					
			3			
1.	Name of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).					
The Quercus Trust						
2.	Check the Appropriate Box If a Member of a Group (See Instructions) (a) [X] (b) [_]					

3.	SEC Use Only					
4.	Source of Funds (See Instructions) PF					
5.	Check If Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) [_]					
6.	. Citizenship or Place of Organization U.S.					
NUMBER OF		7.	Sole Voting Power -0-			
BENE	SHARES BENEFICIALLY OWNED BY		Shared Voting Power 967,599			
EACH REPORTING PERSON WITH		9.	Sole Dispositive Power			
		10.	Shared Dispositive Power 967,599			
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 967,599					
12.	Check Box If the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)					
13.	Percent of Class Represented by Amount in Row (11) 8.8%(1)					
14.	. Type of Reporting Person (See Instructions) OO					

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Item 1.

This Amendment No. 1 to Schedule 13D (this "Amendment No. 1") amends and restates, where indicated, the statement on Schedule 13D relating to the Common Stock of the Issuer filed by The Quercus Trust, David Gelbaum and Monica Chavez Gelbaum (the "reporting persons") with the Securities and Exchange Commission on August 31, 2007 (the "Initial Schedule 13D"). Capitalized terms used in this Amendment No. 1 but not otherwise defined herein have the meanings given to them in the Initial Schedule 13D or prior amendments thereto.

This Amendment No. 1 is being made to disclose the acquisition of additional shares (the "Shares") of Common Stock of the Issuer. Except as otherwise set forth herein, this Amendment No. 1 does not modify any of the information previously reported by the reporting persons in the Initial Schedule 13D.

⁽¹⁾ Based on 11,009,602 shares of Common Stock, par value \$0.0001 per share, as reported in the Issuer's Quarterly Report on Form 10-QSB for the quarter period ended June 30, 2007 and Current Report on Form 8K dated August 16, 2007.

- Item 5. Interest in Securities of the Issuer
- (a) As of the date of this Amendment No. 1, each reporting person beneficially owns 967,599 shares of Common Stock, which are held of record by the Trust.
- (b) Each of David Gelbaum and Monica Chavez Gelbaum, acting alone, has the power to exercise voting and investment control over the shares of Common Stock owned by the Trust.
- (c) Since August 31, 2007, the Trust has purchased shares of Common Stock in brokered transactions as follows:

Date	Number of Shares	Price Per Share
8/31/2007	74,050	\$ 8.7380
9/4/2007	93 , 787	\$ 9.4499
9/5/2007	36,500	\$ 9.4380
9/6/2007	27,500	\$ 9.2680
9/7/2007	35 , 999	\$ 9.1090

- (d) Not applicable.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer

Pursuant to the Power of Attorney filed as Exhibit "B" to Amendment No. 1 to Schedule 13D filed on August 24, 2007 with respect to the issuer Emcore Corp., David Gelbaum has been appointed as Monica Chavez Gelbaum's Attorney-In-Fact.

Item 7. Material to Be Filed as Exhibits

Exhibit A: Agreement Regarding Joint Filing of Amendment No. 1 to Schedule 13D.

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct and agrees that this statement may be filed jointly with the other undersigned parties.

Dated: September 10, 2007 /s/ David Gelbaum

David Gelbaum, Co-Trustee of The Quercus Trust

/s/ David Gelbaum, as Attorney-In-Fact for Monica Chavez Gelbaum $\,$

Monica Chavez Gelbaum, Co-Trustee of The Quercus Trust

/s/ David Gelbaum

The Quercus Trust, David Gelbaum, Co-Trustee of The Quercus Trust

CUSIP No. 043635101

EXHIBIT A

AGREEMENT REGARDING JOINT FILING OF AMENDMENT NO. 1 TO SCHEDULE 13D

The undersigned agree that the Amendment No. 1 to Schedule 13D with respect to the Common Stock of Ascent Solar Technologies, Inc. is a joint filing being made on their behalf.

Dated: September 10, 2007 /s/ David Gelbaum

David Gelbaum, Co-Trustee of The Quercus Trust

/s/ David Gelbaum, as Attorney-In-Fact for Monica Chavez Gelbaum

Monica Chavez Gelbaum, Co-Trustee of The Quercus Trust

/s/ David Gelbaum

The Quercus Trust, David Gelbaum, Co-Trustee of The Quercus Trust