

ADVANCED CELL TECHNOLOGY, INC.
 Form 4
 September 20, 2006

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

OMB APPROVAL
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN 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 *
 SHAPIRO ALAN C

2. Issuer Name and Ticker or Trading Symbol
 ADVANCED CELL TECHNOLOGY, INC.
 [OTCBB:ACTC]

5. Relationship of Reporting Person(s) to Issuer
 (Check all applicable)

(Last) (First) (Middle)
 17567 CAMINO DE YATASTO
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
 08/26/2006

Director 10% Owner
 Officer (give title below) Other (specify below)

PACIFIC PALISADES, CA 90272
 (City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

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 Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)			
			Code	V	Amount	(A) or (D)	Price			
Common Stock	08/26/2006		X		54,565	A	\$ 0.95	395,979	I	By Shapiro Family Trust
Common Stock	09/05/2006		J ⁽¹⁾		11,620	A	\$ 0.72	458,526	I	By Shapiro Family Trust

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

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(9-02)

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)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	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)		7. Title and Underlying Security (Instr. 3 and 4)
					Code	V	(A)	(D)	Date Exercisable	
Common Stock Warrant (right to buy)	\$ 0.95	08/26/2006		P			54,565	09/15/2005	09/15/2010	Common Stock
Common Stock Warrant (right to buy)	\$ 1.6	08/28/2006		P			54,565	08/28/2006	08/28/2011	Common Stock
Convertible Debenture (right to buy)	\$ 2.3	09/05/2006		J			11,620	09/15/2006	09/15/2008	Common Stock
Convertible Debenture (right to buy)	\$ 0.288	09/06/2006		P			434,028	09/06/2006	09/06/2011	Common Stock
Common Stock Warrant (right to buy)	\$ 0.317	09/06/2006		P			217,014	09/06/2006	09/06/2011	Common Stock

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
SHAPIRO ALAN C 17567 CAMINO DE YATASTO PACIFIC PALISADES, CA 90272		X		

Signatures

/s/ Alan C.
Shapiro

09/20/2006

__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).

The Convertible Debenture is redeemable by the Issuer using shares of the Issuer's Common Stock at a price per share equal to the lesser of (i) \$2.30, and (ii) 85% of the average closing prices on the ten days immediately prior to the date of redemption. In accordance with the

(1) terms of the Convertible Debenture, the Issuer is required to redeem (in cash or in shares) 1/30th of the outstanding amount of the convertible Debenture each month during its term. On September 5, the issuer effected the September redemption using shares of Common Stock having a value of \$.72 per share, resulting in the issuance to the reporting person of 11,620 shares of Common Stock.

(2) Face value paid for the debenture (issued on 9/6/06) and the warrant (issued on 9/6/06) was \$211,000.

On August 24, 2006, the Issuer repriced certain outstanding warrants (the "repriced warrants"). In connection with the repricing, the

(3) Issuer issued replacement warrants to those warrant holders who exercised the repriced warrants. The reporting person exercised the repriced warrant and therefore received this replacement warrant for no additional consideration.

(4) Face value paid for the 9/15/05 debenture and the 9/15/05 warrant was \$ ____.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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