AXCELIS TECHNOLOGIES INC Form SC 13G/A January 26, 2007

SCHEDULE 13G (Rule 13d-102)

Information to be Included in Statements Filed Pursuant to Rule 13d-1(b), (c) and (d) and Amendments Thereto Filed Pursuant to Rule 13d-2.

> SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

Axcelis Technologies, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

054540109

(CUSIP Number)

December 31, 2006

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

[X] Rule 13d-1(b)
[] Rule 13d-1(c)
[] Rule 13d-1(d)

* 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 the disclosures provided in a prior cover page.

The information required in 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).

CU	SIP No. 054	540109 13G		
1		PORTING PERSON / NTIFICATION NO. OF ABOVE PERSON		
	Artisan Pa	rtners Limited Partnership		
2	CHECK THE (see Inst:	APPROPRIATE BOX IF A MEMBER OF A GROUP actions) (a) [] (b) []		
	Not Applicable			
3	SEC USE Of	LY		
4	CITIZENSH	P OR PLACE OF ORGANIZATION		
	Delaware			
		5 SOLE VOTING POWER None		
BE	UMBER OF SHARES NEFICIALLY OWNED BY	6 SHARED VOTING POWER		
R	EACH EPORTING	None		
		7 SOLE DISPOSITIVE POWER		
		None		
		8 SHARED DISPOSITIVE POWER		
		None		
9	AGGREGATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
	None			
10		IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES		
	Not Applic	able		
11	PERCENT OF	CLASS REPRESENTED BY AMOUNT IN ROW (9)		

0.0%					
12 TYPE OF RE (see Instr	CPORTING PERSON ructions)				
IA					
	Page 2 of 12				
CUSIP No. 054	13G				
	PORTING PERSON R.S. IDENTIFICATION NO. OF ABOVE PERSON				
Artisan Ir	vestment Corporation				
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see Instructions) (a) (b)				
Not Applic	Not Applicable				
3 SEC USE ON 4 CITIZENSHI	P OR PLACE OF ORGANIZATION				
Wisconsin					
	5 SOLE VOTING POWER				
	None				
NUMBER OF SHARES BENEFICIALLY OWNED BY	6 SHARED VOTING POWER				
EACH REPORTING	None				
	7 SOLE DISPOSITIVE POWER				
	None				
	8 SHARED DISPOSITIVE POWER				

	None				
10	CHECK BOX (see Instr	IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES ructions)			
	Not Applic	able			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)				
	0.0%				
12	TYPE OF RE (see Instr	PORTING PERSON ructions)			
	CO				
		Page 3 of 12			
CU	SIP No. 054	540109 13G			
1		CPORTING PERSON R.S. IDENTIFICATION NO. OF ABOVE PERSON			
	Andrew A.	Ziegler			
2	CHECK THE (see Instr	APPROPRIATE BOX IF A MEMBER OF A GROUP ructions) (a) [(b) [
	Not Applic	able			
3	SEC USE ON	ILY			
4	CITIZENSHI	P OR PLACE OF ORGANIZATION			
	U.S.A.				
		5 SOLE VOTING POWER			
N	CNEFICIALLY OWNED BY EACH REPORTING	None			
		6 SHARED VOTING POWER			
		None			
1		7 SOLE DISPOSITIVE POWER			
		None			

	8 SHARED DISPOSITIVE POWER
	None
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	None
0	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see Instructions)
	Not Applicable
.1	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
	0.0%
.2	TYPE OF REPORTING PERSON (see Instructions)
	IN
CL	Page 4 of 12 JSIP No. 054540109 13G
CU 1	
	JSIP No. 054540109 13G NAME OF REPORTING PERSON
	USIP No. 054540109 13G NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Carlene Murphy Ziegler CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see Instructions) (a) [
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SHARES BENEFICIALLY OWNED BY EACH		6 SHARED VOTING POWER Y None				
	PORTING PERSON WITH	7 SOLE DISPOSITIVE POWER				
		None				
		8 SHARED DISPOSITIVE POWER				
		None				
9	AGGREGAT	E AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	None					
10		K IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES cructions)				
	Not Appl	icable				
11	PERCENT	DF CLASS REPRESENTED BY AMOUNT IN ROW (9)				
	0.0%					
12	2 TYPE OF REPORTING PERSON (see Instructions)					
	IN					
		Page 5 of 12				
Item	1(a)	Name of Issuer:				
		Axcelis Technologies, Inc.				
Item	1(b)	Address of Issuer's Principal Executive Offices:				
		108 Cherry Hill Drive Beverly, Massachusetts 01915				
Item	12(a)	Name of Person Filing:				
		Artisan Partners Limited Partnership ("Artisan Partners") Artisan Investment Corporation, the general partner of Artisan Partners ("Artisan Corp.") Andrew A. Ziegler				
T+ ~~~	2(h)	Carlene Murphy Ziegler				
rcell	12(b)	Address of Principal Business Office: Artisan Partners, Artisan Corp., Mr. Ziegler and Ms. Ziegler are all located at:				

875 East Wisconsin Avenue, Suite 800 Milwaukee, WI 53202

Item 2(c) Citizenship:

Artisan Partners is a Delaware limited partnership Artisan Corp. is a Wisconsin corporation Mr. Ziegler and Ms. Ziegler are U.S. citizens

Item 2(d) Title of Class of Securities:

Common Stock

Item 2(e) CUSIP Number:

054540109

Item 3 Type of Person:

(e) Artisan Partners is an investment adviser registered under section 203 of the Investment Advisers Act of 1940; Artisan Corp. is the General Partner of Artisan Partners; Mr. Ziegler and Ms. Ziegler are the principal stockholders of Artisan Corp.

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- Item 4 Ownership (at December 31, 2006):
 - (a) Amount owned "beneficially" within the meaning of rule 13d-3:

None

(b) Percent of class:

0.0% (based on 101,297,394 shares outstanding as of November 3, 2006)

- (c) Number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote: None
 - (ii) shared power to vote or to direct the vote: None
 - (iii) sole power to dispose or to direct the disposition of: None
 - (iv) shared power to dispose or to direct disposition
 of: None

Item 5 Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [X].

Item 6 Ownership of More than Five Percent on Behalf of Another Person:

Not Applicable

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person:

Not Applicable

Item 8 Identification and Classification of Members of the Group:

Not Applicable

Item 9 Notice of Dissolution of Group:

Not Applicable

Item 10 Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: January 26, 2007

ARTISAN INVESTMENT CORPORATION for itself and as general partner of ARTISAN PARTNERS LIMITED PARTNERSHIP

By: Lawrence A. Totsky*

ANDREW A. ZIEGLER

Andrew A. Ziegler*

CARLENE MURPHY ZIEGLER

Carlene Murphy Ziegler*

*By: /s/ Lawrence A. Totsky

Lawrence A. Totsky Chief Financial Officer of Artisan Investment Corporation Attorney-in-Fact for Andrew A. Ziegler

Attorney-in-Fact for Carlene Murphy Ziegler

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Exhibit Index

- Exhibit 1 Joint Filing Agreement dated as of January 26, 2007 by and among Artisan Partners Limited Partnership, Artisan Investment Corporation, Andrew A. Ziegler, and Carlene Murphy Ziegler
- Exhibit 2 Power of Attorney of Andrew A. Ziegler dated as of April 2, 2002
- Exhibit 3 Power of Attorney of Carlene M. Ziegler dated as of April 2, 2002

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EXHIBIT 1

JOINT FILING AGREEMENT

The undersigned hereby agree to the joint filing of the Schedule 13G to which this Agreement is attached.

Dated: January 26, 2007

ARTISAN INVESTMENT CORPORATION for itself and as general partner of ARTISAN PARTNERS LIMITED PARTNERSHIP

By: Lawrence A. Totsky*

ANDREW A. ZIEGLER

Andrew A. Ziegler*

CARLENE MURPHY ZIEGLER

Carlene Murphy Ziegler*

*By: /s/ Lawrence A. Totsky Lawrence A. Totsky Chief Financial Officer of Artisan Investment Corporation Attorney-in-Fact for Andrew A. Ziegler Attorney-in-Fact for Carlene Murphy Ziegler

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EXHIBIT 2

POWER OF ATTORNEY

The undersigned, Andrew A. Ziegler, hereby appoints Lawrence A. Totsky, Janet D. Olsen, and Gregory K. Ramirez, and each of them individually, his true and lawful attorney-in-fact and agent, with full power to execute and file with the United States Securities and Exchange Commission and any stock exchange or similar authority, for and on his behalf in any and all capacities, any and all reports required to be filed pursuant to Section 13 of the Securities Exchange Act of 1934 and the rules thereunder, including but not limited to reports on Schedule 13D or 13G, any and all amendments to such reports, with all exhibits, and any other forms or documents as may be necessary in connection with the filing of such reports with the United States Securities and Exchange Commission and any stock exchange or similar authority, granting unto said attorney full power and authority to do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete, as fully as the undersigned might or could do in person.

This Power of Attorney shall remain in full force and effect until revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact and agents.

IN WITNESS WHEREOF the undersigned has caused this Power of Attorney to be executed this 2nd day of April, 2002.

/s/ Andrew A. Ziegler Andrew A. Ziegler

STATE OF WISCONSIN)) SS. COUNTY OF MILWAUKEE)

I, Marie V. Glowacki, a Notary Public in and for the County of Milwaukee, State of Wisconsin, DO HEREBY CERTIFY that Andrew A. Ziegler, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 2 day of April, 2002.

/s/ Marie V. Glowacki -------Notary Public

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EXHIBIT 3

POWER OF ATTORNEY

The undersigned, Carlene Murphy Ziegler, hereby appoints Lawrence A. Totsky, Janet D. Olsen, and Gregory K. Ramirez, and each of them individually, her true and lawful attorney-in-fact and agent, with full power to execute and file with the United States Securities and Exchange Commission and any stock exchange or similar authority, for and on her behalf in any and all capacities, any and all reports required to be filed pursuant to Section 13 of the Securities Exchange Act of 1934 and the rules thereunder, including but not limited to reports on

Schedule 13D or 13G, any and all amendments to such reports, with all exhibits, and any other forms or documents as may be necessary in connection with the filing of such reports with the United States Securities and Exchange Commission and any stock exchange or similar authority, granting unto said attorney full power and authority to do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete, as fully as the undersigned might or could do in person.

This Power of Attorney shall remain in full force and effect until revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact and agents.

IN WITNESS WHEREOF the undersigned has caused this Power of Attorney to be executed this 2 day of April, 2002.

/s/ Carlene Murphy Ziegler Carlene Murphy Ziegler

STATE	OF	WISCONSIN)	
)	SS.
COUNTY	OF	MILWAUKEE)	

I, Kim R. Ruffert, a Notary Public in and for the County of Milwaukee, State of Wisconsin, DO HEREBY CERTIFY that Carlene Murphy Ziegler, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that she signed and delivered the said instrument as her own free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 2 day of April, 2002.

/s/ Kim R. Ruffert ------Notary Public

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