INVITROGEN CORP
Form SC 13G/A
February 13, 2007

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

SCHEDULE 13G
(Rule 13d-102)

Information Statement Pursuant to Rules 13d-1 and 13d-2
Under the Securities Exchange Act of 1934
(Amendment No. 4)*

Invitrogen Corporation
(Name of Issuer)

Common Stock
(Title of Class of Securities)

46185R100
(CUSIP Number)

December 31, 2006
Date of Event Which Requires Filing of the Statement

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

o Rule 13d-1(b)
x Rule 13d-1(c)
o 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 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).

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1.	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON **Citadel Limited Partnership**		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o		
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION **Illinois limited partnership**		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		5.	SOLE VOTING POWER **0**
		6.	SHARED VOTING POWER **1,199,934 shares**
		7.	SOLE DISPOSITIVE POWER **0**
		8.	SHARED DISPOSITIVE POWER **See Row 6 above.**
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON **See Row 6 above.**		
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES o		
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) **Approximately 2.4% as of the date of this filing**		
12.	TYPE OF REPORTING PERSON **PN; HC**		

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1.	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON **Citadel Investment Group, L.L.C.**		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o		
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION **Delaware limited liability company**		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		5.	SOLE VOTING POWER **0**
		6.	SHARED VOTING POWER **1,199,934 shares**
		7.	SOLE DISPOSITIVE POWER **0**
		8.	SHARED DISPOSITIVE POWER **See Row 6 above.**
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON **See Row 6 above.**		
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES o		
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) **Approximately 2.4% as of the date of this filing**		
12.	TYPE OF REPORTING PERSON **OO; HC**		

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1.	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON **Kenneth Griffin**		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o		
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION **U.S. Citizen**		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		5.	SOLE VOTING POWER **0**
		6.	SHARED VOTING POWER **1,199,934 shares**
		7.	SOLE DISPOSITIVE POWER **0**
		8.	SHARED DISPOSITIVE POWER **See Row 6 above.**
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON **See Row 6 above.**		
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES o		
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) **Approximately 2.4% as of the date of this filing**		
12.	TYPE OF REPORTING PERSON **IN; HC**		

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1.	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON **Citadel Equity Fund Ltd.**		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o		
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION **Cayman Islands company**		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		5.	SOLE VOTING POWER **0**
		6.	SHARED VOTING POWER **1,199,934 shares**
		7.	SOLE DISPOSITIVE POWER **0**
		8.	SHARED DISPOSITIVE POWER **See Row 6 above.**
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON **See Row 6 above.**		
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES o		
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) **Approximately 2.4% as of the date of this filing**		
12.	TYPE OF REPORTING PERSON **CO**		

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1.	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON **Citadel Derivatives Group LLC**		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o		
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION **Delaware limited liability company**		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		5.	SOLE VOTING POWER **0**
		6.	SHARED VOTING POWER **1,199,934 shares**
		7.	SOLE DISPOSITIVE POWER **0**
		8.	SHARED DISPOSITIVE POWER **See Row 6 above.**
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON **See Row 6 above.**		
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES o		
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) **Approximately 2.4% as of the date of this filing**		
12.	TYPE OF REPORTING PERSON **OO; BD**		

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Item 1(a) Name of Issuer: **INVITROGEN CORPORATION**
1(b) Address of Issuer's Principal Executive Offices:

1600 Faraday Avenue
Carlsbad, CA 92008

Item 2(a) Name of Person Filing[1]
Item 2(b) Address of Principal Business Office
Item 2(c) Citizenship

Citadel Limited Partnership
131 S. Dearborn Street
32nd Floor
Chicago, Illinois 60603
Illinois limited partnership

Citadel Investment Group, L.L.C.
131 S. Dearborn Street
32nd Floor
Chicago, Illinois 60603
Delaware limited liability company

Kenneth Griffin
131 S. Dearborn Street
32nd Floor
Chicago, Illinois 60603
U.S. Citizen

Citadel Equity Fund Ltd.
c/o Citadel Investment Group, L.L.C.
131 S. Dearborn Street
32nd Floor
Chicago, Illinois 60603
Cayman Islands company

Citadel Derivatives Group LLC
c/o Citadel Investment Group, L.L.C.
131 S. Dearborn Street
32nd Floor
Chicago, Illinois 60603
Delaware limited liability company

[1] Citadel Wellington LLC, a Delaware limited liability company ("CW"), and Citadel Kensington Global Strategies Fund Ltd., a Bermuda company ("CKGSF"), collectively own 100% of Citadel Holdings Ltd., a Cayman Islands company ("CH"), which owns 100% of Citadel Equity Fund Ltd. ("CEF"). None of CW, CKGSF or CH has any control over the voting or disposition of securities held by Citadel Equity Fund Ltd. CW and Citadel Limited Partnership collectively own 100% of Citadel Derivatives Group LLC, but CW does not have any control over the voting or disposition of securities held by Citadel Derivatives Group LLC.

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2(d) Title of Class of Securities:

Common Stock, par value $0.01.

2(e) CUSIP Number: **46185R100**

Item 3 If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:

(a) [__] Broker or dealer registered under Section 15 of the Exchange Act;

(b) [__] Bank as defined in Section 3(a)(6) of the Exchange Act;

(c) [__] Insurance company as defined in Section 3(a)(19) of the Exchange Act;

(d) [__] Investment company registered under Section 8 of the Investment Company Act;

(e) [__] An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);

(f) [__] An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);

(g) [__] A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);

(h) [__] A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;

(i) [__] A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;

(j) [__] Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

If this statement is filed pursuant to Rule 13d-1(c), check this box. x

Item 4 Ownership:

CITADEL LIMITED PARTNERSHIP
CITADEL INVESTMENT GROUP, L.L.C.
KENNETH GRIFFIN
CITADEL EQUITY FUND LTD.
CITADEL DERIVATIVES GROUP LLC

(a) Amount beneficially owned:

1,199,934 shares

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(b) Percent of Class:

Approximately 2.4% as of the date of this filing

(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote:

0

(ii) shared power to vote or to direct the vote:

See Item 4(a) above.

(iii) sole power to dispose or to direct the disposition of:

0

(iv) shared power to dispose or to direct the disposition of:

See Item 4(a) above.

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:

See Item 2 above.

Item 8 Identification and Classification of Members of the Group:

Not Applicable.

Item 9 Notice of Dissolution of Group:

Not Applicable.

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Item 10 Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above 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.

* John C. Nagel is signing on behalf of Kenneth Griffin as attorney-in-fact pursuant to a power of attorney previously filed with the Securities and Exchange Commission on February 24, 2006, and hereby incorporated by reference herein. The power of attorney was filed as an attachment to a filing by Citadel Limited Partnership on Schedule 13G for Morgans Hotel Group Co.

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

Dated this 13th day of February, 2007

KENNETH GRIFFIN By: /s/ John C. Nagel John C. Nagel, attorney-in-fact*	**CITADEL EQUITY FUND LTD.** By: Citadel Limited Partnership, its Portfolio Manager
CITADEL LIMITED PARTNERSHIP By: Citadel Investment Group, L.L.C., its General Partner By: /s/ John C. Nagel John C. Nagel, Director and Associate General Counsel	By: Citadel Investment Group, L.L.C., its General Partner By: /s/ John C. Nagel John C. Nagel, Director and Associate General Counsel **CITADEL INVESTMENT GROUP, L.L.C.** By: /s/ John C. Nagel John C. Nagel, Director and Associate General Counsel
CITADEL DERIVATIVES GROUP LLC By: Citadel Limited Partnership, its Managing Member By: Citadel Investment Group, L.L.C., its General Partner By: /s/ John C. Nagel John C. Nagel, Director and Associate General Counsel	