ADAGE CAPITAL PARTNERS GP LLC Form SC 13G/A January 18, 2007

> SECURITIES & EXCHANGE COMMISSION Washington, D.C. 20549

> > SCHEDULE 13G/A* (Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1(b), (c) AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO 13d-2(b)

(Amendment No. 1)

Advanced Magnetics, Inc. (Name of Issuer)

Common Stock, par value \$.01 per common share (Title of Class of Securities)

00753P103 (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 13G/A is filed:

- [] Rule 13d-1(b)
- [X] Rule 13d-1(c)
 [] Rule 13d-1(d)
- [] Kule 150-1(0)

(Page 1 of 11 Pages)

*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 purposes 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) NAMES OF REPORTING PERSONS

	I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Adage Capital Partners	5, L.B	· •
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP **		[] [X]
(3)	SEC USE ONLY		
(4)	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF	(5) SOLE VOTING POWER -0-		
SHARES			
BENEFICIALL	Y (6) SHARED VOTING POWER 550,000		
OWNED BY			
EACH	(7) SOLE DISPOSITIVE POWER -0-		
REPORTING			
PERSON WITH	(8) SHARED DISPOSITIVE POWER 550,000		
(9)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 550,000		
(10)	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES **		[]
(11)	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.9%		
(12)	TYPE OF REPORTING PERSON ** PN		
	** SEE INSTRUCTIONS BEFORE FILLING OUT!		
CUSIP No. 0	0753P103 13G/A Page	3 of	11 Page
(1)	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Adage Capital Partners GP,	, L.L.	.c.
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP **	(a) (b)	[] [X]
(3)	SEC USE ONLY		

(4)	CITIZEN	ISHIP OR PL	ACE OF ORG Delawaı		NC			
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(12)	TYPE	OF	REPORTIN	IG PERSOI	4 **	00				
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OWNED BY										
EACH	(7)	SOLE DIS	POSITIV	E POWER	-0-				
REPORTING										
PERSON WITH	H (8) SHARED DISPOSITIVE POWER 550,000									

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(9)	Edgar Filing: ADAGE CAPITAL PARTNERS GP LLC - Form SC 13G/A AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON							
	DI LACII	NEFORIING FEI	(301)	550,000				
(10)		OX IF THE AGGE (9) EXCLUDES (REGATE AMOUNT CERTAIN SHARES	**			[]	
(11)		OF CLASS REPH NT IN ROW (9)		3.9%				
				J.9%				
(12)	TYPE OF	REPORTING PER	SON **	IN				
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CUSIP No. (0753P103		13G/A		Page	6 of	11 Pages	
(1)	NAMES O	F REPORTING PE	ERSONS					
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(2)	СНЕСК Т	HE APPROPRIATE	E BOX IF A MEM	ber of a gr	OUP **	· .		
							[] [X]	
(3)	SEC USE ONLY							
(4)	CITIZEN		OF ORGANIZATI	 ON				
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SHARES				-0-				
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OWNED BY				550,000				
EACH	(7)	SOLE DISPOSI	IVE POWER					
DEDODUTING				-0-				

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

REPORTING -----

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

(10) CHECK BOX IF THE AGGREGATE AMOUNT

IN ROW (9) EXCLUDES CERTAIN SHARES **

PERSON WITH (8) SHARED DISPOSITIVE POWER

[]

550,000

550,000

3.9%

(12)	TYPE O	F REPORTING	PERSON	* *
				IN

** SEE INSTRUCTIONS BEFORE FILLING OUT!

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Item 1(a). Name of Issuer:

The name of the issuer is Advanced Magnetics, Inc. (the "Company").

Item 1(b). Address of Issuer's Principal Executive Offices:

The Company's principal executive offices are located at 125 CambridgePark Drive, 6th Floor, Cambridge, MA 02140.

Item 2(a). Name of Person Filing:

This statement is filed by:

- (i) Adage Capital Partners, L.P., a Delaware limited partnership ("ACP") with respect to the shares of Common Stock directly owned by it;
- (ii) Adage Capital Partners GP, L.L.C., a limited liability company organized under the laws of the State of Delaware ("ACPGP"), as general partner of ACP with respect to the shares of Common Stock directly owned by ACP;
- (iii) Adage Capital Advisors, L.L.C., a limited liability company organized under the laws of the State of Delaware ("ACA"), as managing member of ACPGP, general partner of ACP, with respect to the shares of Common Stock directly owned by ACP;
- (iv) Phillip Gross ("Mr. Gross"), as managing member of ACA, managing member of ACPGP, general partner of ACP with respect to the shares of Common Stock directly owned by ACP; and
 - (v) Robert Atchinson ("Mr. Atchinson"), as managing member of ACA, managing member of ACPGP, general partner of ACP with respect to the shares of Common Stock directly owned by ACP.

The foregoing persons are hereinafter sometimes collectively referred to as the "Reporting Persons." Any disclosures herein with respect to persons other than the Reporting Persons are made on information and belief after making inquiry to the appropriate party.

Item 2(b). Address of Principal Business Office or, if None, Residence:

The address of the business office of each of the Reporting Persons is 200 Clarendon Street, 52nd floor, Boston, Massachusetts 02116.

Item 2(c). Citizenship:

ACP is a limited partnership organized under the laws of the State of Delaware. ACPGP and ACA are limited liability companies organized under the laws of the State of Delaware. Messrs. Gross and Atchinson are citizens of the United States.

Item 2(d). Title of Class of Securities:

Common Stock, par value \$.01 per common share (the "Common Stock")

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Item 2(e). CUSIP Number:

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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 Act,
- (b) [] Bank as defined in Section 3(a)(6) of the Act,
- (c) [] Insurance Company as defined in Section 3(a)(19) of the Act,
- (d) [] Investment Company registered under Section 8 of the Investment Company Act of 1940,
- (e) [] Investment Adviser in accordance with Rule 13d-1(b)(1)(ii)(E),
- (f) [] Employee Benefit Plan or Endowment Fund in accordance with 13d-1(b)(1)(ii)(F),
- (g) [] Parent Holding Company or control person in accordance with Rule 13d-1(b)(1)(ii)(G),
- (h) [] Savings Association as defined in Section 3(b) of the Federal Deposit Insurance Act,
- (i) [] Church Plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940,
- (j) [] Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

If this statement is filed pursuant to 13d-1(c), check this box: [x]

Item 4. Ownership.

A. Adage Capital Partners, L.P., Adage Capital Partners GP, L.L.C. and Adage Capital Advisors, L.L.C.

- (a) Amount beneficially owned: 550,000
- (b) Percent of class: 3.9% The percentages used herein and in the rest of Item 4 are calculated based upon the 14,033,532 shares of Common Stock issued and outstanding as of December 7, 2006 as reflected in the Form 8-K filed by the Company on December 8, 2006.
- (c)(i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 550,000
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 550,000.

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ACP has the power to dispose of and the power to vote the shares of Common Stock beneficially owned by it, which power may be exercised by its general partner, ACPGP. ACA, as managing member of ACPGP, directs ACPGP's operations. Neither ACPGP nor ACA directly own any shares of Common Stock. By reason of the provisions of Rule 13d-3 of the Securities Exchange Act of 1934 (the "Act"), ACPGP and ACA may be deemed to beneficially own the shares owned by ACP.

- B. Robert Atchinson and Phillip Gross
 - (a) Amount beneficially owned: 550,000
 - (b) Percent of class: 3.9%
 - (c)(i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 550,000
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 550,000.

Messrs. Atchinson and Gross, as managing members of ACA, have shared power to vote the Common Stock beneficially owned by ACP. Neither Mr. Atchinson nor Mr. Gross directly own any shares of Common Stock. By reason of the provisions of Rule 13d-3 of the Act, each may be deemed to beneficially own the shares beneficially owned by ACP.

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 Persons have ceased to be the beneficial owner of more than five percent of the Common Stock, 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.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

Not applicable.

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Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

Each of the Reporting Persons hereby makes the following 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.

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SIGNATURES

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

DATED: January 18, 2007

ADAGE CAPITAL PARTNERS, L.P. By: Adage Capital Partners GP, L.L.C.,

- its general partner
- By: Adage Capital Advisors, L.L.C., its managing member

/s/ Robert Atchinson

Name: Robert Atchinson Title: Managing Member

ADAGE CAPITAL PARTNERS GP, L.L.C. By: Adage Capital Advisors, L.L.C., its managing member

/s/ Robert Atchinson

Name: Robert Atchinson Title: Managing Member

ADAGE CAPITAL ADVISORS, L.L.C.

/s/ Robert Atchinson

Name: Robert Atchinson

Title: Managing Member

ROBERT ATCHINSON

/s/ Robert Atchinson

ROBERT ATCHINSON, individually

PHILLIP GROSS

/s/ Phillip Gross

PHILLIP GROSS, individually