

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

SCHEDULE 13G  
(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 RULE 13d-2(b)

(Amendment No. 2)

InfuSystem Holdings, Inc.

-----  
(Name of Issuer)

Common Stock, \$.0001 Par Value

-----  
(Title of Class of Securities)

45685K102

-----  
(CUSIP Number)

December 31, 2008

-----  
(Date of Event Which Requires Filing of this Statement)

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

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

CUSIP No. 45685K102  
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1. NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Brian Taylor

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

United States

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

1,727,500

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

1,727,500

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,727,500

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

9.1%

12. TYPE OF REPORTING PERSON

IN

CUSIP No. 45685K102

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1. NAME OF REPORTING PERSONS

I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Pine River Capital Management L.P.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware, United States

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

1,727,500

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

1,727,500

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,727,500

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

9.1%

12. TYPE OF REPORTING PERSON

PN

CUSIP No. 45685K102

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1. NAME OF REPORTING PERSONS

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Nisswa Master Fund Ltd.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

1,462,500

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

1,462,500

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,462,500

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

[ ]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

7.8%

12. TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

CO

-----  
CUSIP No. 45685K102  
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Item 1(a). Name of Issuer:

InfuSystem Holdings, Inc.  
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Item 1(b). Address of Issuer's Principal Executive Offices:

1551 East Lincoln Avenue, Suite 200  
Madison Heights, MI 48071  
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Item 2(a). Name of Persons Filing:

Brian Taylor  
Pine River Capital Management L.P.  
Nisswa Master Fund Ltd.  
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Item 2(b). Address of Principal Business Office, or if None, Residence:

Brian Taylor  
Pine River Capital Management L.P.  
601 Carlson Parkway  
Suite 330  
Minnetonka, MN 55305  
  
Nisswa Master Fund Ltd.  
c/o Pine River Capital Management L.P.  
601 Carlson Parkway  
Suite 330  
Minnetonka, MN 55305  
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Item 2(c). Citizenship:

Brian Taylor - United States  
Pine River Capital Management L.P. - Delaware, United States  
Nisswa Master Fund Ltd. - Cayman Islands

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

Common Stock, \$.0001 Par Value  
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Item 2(e). CUSIP Number:

45685K102  
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Item 3. If This Statement is Filed Pursuant to Rule 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).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

Brian Taylor - 1,727,500  
Pine River Capital Management L.P. - 1,727,500  
Nisswa Master Fund Ltd. - 1,462,500  
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(b) Percent of class:

Brian Taylor - 9.1%  
Pine River Capital Management L.P. - 9.1%  
Nisswa Master Fund Ltd. - 7.8%  
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(c) Number of shares as to which such person has:

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

Brian Taylor - 0  
Pine River Capital Management L.P. - 0  
Nisswa Master Fund Ltd. - 0

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

Brian Taylor - 1,727,500  
Pine River Capital Management L.P. - 1,727,500  
Nisswa Master Fund Ltd. - 1,462,500

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

Brian Taylor - 0  
Pine River Capital Management L.P. - 0  
Nisswa Master Fund Ltd. - 0

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

Brian Taylor - 1,727,500  
Pine River Capital Management L.P. - 1,727,500  
Nisswa Master Fund Ltd. - 1,462,500

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

N/A  
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Item 6. Ownership of More Than Five Percent on Behalf of Another Person.

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

N/A  
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Item 8. Identification and Classification of Members of the Group.

N/A  
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Item 9. Notice of Dissolution of Group.

N/A  
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Item 10. Certifications.

By signing below, each reporting person certifies that, to the best of its 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.

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.

/s/ Brian Taylor\*

-----  
Brian Taylor

PINE RIVER CAPITAL MANAGEMENT L.P.\*

By: Pine River Capital Management LLC, its general partner

/s/ Brian Taylor

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By: Brian Taylor  
Title: Sole Member

Nisswa Master Fund Ltd.\*

/s/ Brian Taylor

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By: Brian Taylor  
Title: Director

Date: February 9, 2009

\*The Reporting Persons disclaim beneficial ownership in the common stock reported herein except to the extent of their pecuniary interest therein.

EXHIBIT A

AGREEMENT

The undersigned agree that this Schedule 13G dated February 9, 2009 relating to the Common Stock, \$.0001 Par Value of InfuSystem Holdings, Inc. shall be filed on behalf of the undersigned.

/s/ Brian Taylor

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Brian Taylor

PINE RIVER CAPITAL MANAGEMENT L.P.

By: Pine River Capital Management LLC, its general partner

/s/ Brian Taylor

-----  
By: Brian Taylor  
Title: Sole Member

Nisswa Master Fund Ltd.

/s/ Brian Taylor

-----  
By: Brian Taylor

Title: Director