
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

SCHEDULE 13G

**Under the Securities Exchange Act of 1934
(Amendment No. 1)***

Infusystem Holdings, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share
(Title of Class of Securities)

45685K102
(CUSIP Number)

December 31, 2010
(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)

* 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).

CUSIP No. 45685K102

1	NAMES OF REPORTING PERSONS Global Undervalued Securities Master Fund, L.P.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="radio"/> (b) <input type="radio"/>		
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 2,567,480	
	6	SHARED VOTING POWER 0	
	7	SOLE DISPOSITIVE POWER 2,567,480	
	8	SHARED DISPOSITIVE POWER 0	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,567,480**		
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="radio"/>		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 12.6%**		
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN		

**SEE ITEM 4(b).

CUSIP No. 45685K102

1	NAMES OF REPORTING PERSONS Global Undervalued Securities Fund, L.P.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="radio"/> (b) <input type="radio"/>		
3	SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 2,567,480	
	6	SHARED VOTING POWER 0	
	7	SOLE DISPOSITIVE POWER 2,567,480	
	8	SHARED DISPOSITIVE POWER 0	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,567,480**		
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="radio"/>		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 12.6%**		
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN		

**SEE ITEM 4(b).

CUSIP No. 45685K102

1	NAMES OF REPORTING PERSONS Global Undervalued Securities Fund (QP), L.P.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="radio"/> (b) <input type="radio"/>		
3	SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 2,567,480	
	6	SHARED VOTING POWER 0	
	7	SOLE DISPOSITIVE POWER 2,567,480	
	8	SHARED DISPOSITIVE POWER 0	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,567,480**		
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="radio"/>		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 12.6%**		
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN		

**SEE ITEM 4(b).

CUSIP No. 45685K102

1	NAMES OF REPORTING PERSONS Global Undervalued Securities Fund, Ltd.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="radio"/> (b) <input type="radio"/>		
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 2,567,480	
	6	SHARED VOTING POWER 0	
	7	SOLE DISPOSITIVE POWER 2,567,480	
	8	SHARED DISPOSITIVE POWER 0	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,567,480**		
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="radio"/>		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 12.6%**		
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO		

**SEE ITEM 4(b).

CUSIP No. 45685K102

1	NAMES OF REPORTING PERSONS Kleinheinz Capital Partners, Inc.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="radio"/> (b) <input type="radio"/>		
3	SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Texas		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 2,567,480	
	6	SHARED VOTING POWER 0	
	7	SOLE DISPOSITIVE POWER 2,567,480	
	8	SHARED DISPOSITIVE POWER 0	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,567,480**		
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="radio"/>		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 12.6%**		
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IA		

**SEE ITEM 4(b).

CUSIP No. 45685K102

1	NAMES OF REPORTING PERSONS Kleinheinz Capital Partners LDC		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="radio"/> (b) <input type="radio"/>		
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 2,567,480	
	6	SHARED VOTING POWER 0	
	7	SOLE DISPOSITIVE POWER 2,567,480	
	8	SHARED DISPOSITIVE POWER 0	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,567,480**		
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="radio"/>		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 12.6%**		
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO		

**SEE ITEM 4(b).

CUSIP No. 45685K102

1	NAMES OF REPORTING PERSONS John Kleinheinz	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="radio"/> (b) <input type="radio"/>	
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 2,567,480
	6	SHARED VOTING POWER 0
	7	SOLE DISPOSITIVE POWER 2,567,480
	8	SHARED DISPOSITIVE POWER 0
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,567,480**	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 12.6%**	
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

**SEE ITEM 4(b).

SCHEDULE 13G/A

This Amendment No. 1 to Schedule 13G (this “Amendment”) is an amendment to the initial statement on Schedule 13G relating to shares of Common Stock, par value \$0.0001 per share (the “Common Stock”), of Infusystem Holdings, Inc., a Delaware corporation (the “Issuer”), filed with the Securities and Exchange Commission on December 19, 2007 (the “Schedule 13G”).

This Amendment is being filed on behalf of Global Undervalued Securities Master Fund, L.P., a Cayman Islands exempted limited partnership (the “Master Fund”), Global Undervalued Securities Fund, L.P., a Delaware limited partnership (the “Domestic Fund”), Global Undervalued Securities Fund (QP), L.P., a Delaware limited partnership (the “Domestic QP Fund” and together with the Domestic Fund, the “Domestic Funds”), Global Undervalued Securities Fund, Ltd., a Cayman Islands exempted company (the “Cayman Fund” and together with the Domestic Funds, the “Feeder Funds”), Kleinheinz Capital Partners, Inc., a Texas corporation (“Kleinheinz”), Kleinheinz Capital Partners LDC, a Cayman Islands limited duration company (“LDC”), and John Kleinheinz (collectively with the Master Fund, the Feeder Funds, Kleinheinz, and LDC, the “Reporting Persons”).

This Amendment relates to shares of Common Stock of the Issuer purchased by Kleinheinz for the account of the Master Fund. Kleinheinz acts as investment adviser to the Feeder Funds and the Master Fund. The Feeder Funds serve as general partners of the Master Fund. LDC serves as general partner of the Domestic Funds. Mr. Kleinheinz is the principal of both Kleinheinz and LDC.

This Amendment amends and restates the Schedule 13G as follows.

Item 1(a) Name of Issuer.

Infusystem Holdings, Inc.

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

31700 Research Park Drive
Madison Heights, Michigan 48071

Item 2(a) Name of Person Filing.

- (1) Kleinheinz Capital Partners, Inc.
 - (2) Kleinheinz Capital Partners LDC
 - (3) John Kleinheinz
 - (4) Global Undervalued Securities Master Fund, L.P.
-

- (5) Global Undervalued Securities Fund, L.P.
- (6) Global Undervalued Securities Fund (QP), L.P.
- (7) Global Undervalued Securities Fund, Ltd.

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

- (1) Kleinheinz Capital Partners, Inc.
301 Commerce Street, Suite 1900
Forth Worth, Texas 76102
 - (2) Kleinheinz Capital Partners LDC
c/o Walkers SPV Limited
Walker House, 87 Mary Street
George Town, Grand Cayman
KYI-9002 Cayman Islands
 - (3) John Kleinheinz
301 Commerce Street, Suite 1900
Forth Worth, Texas 76102
 - (4) Global Undervalued Securities Master Fund, L.P.
c/o BNY Mellon Alternative Investment Services Ltd.
48 Par-La-Ville Road, Suite 464
Hamilton HM 11, Bermuda
 - (5) Global Undervalued Securities Fund, L.P.
c/o BNY Mellon Alternative Investment Services Ltd.
48 Par-La-Ville Road, Suite 464
Hamilton HM 11, Bermuda
 - (6) Global Undervalued Securities Fund (QP), L.P.
c/o BNY Mellon Alternative Investment Services Ltd.
48 Par-La-Ville Road, Suite 464
Hamilton HM 11, Bermuda
 - (7) Global Undervalued Securities Fund, Ltd.
c/o BNY Mellon Alternative Investment Services Ltd.
48 Par-La-Ville Road, Suite 464
Hamilton HM 11, Bermuda
-

Item 2(c) Citizenship or Place of Organization.

- (1) Kleinheinz Capital Partners, Inc. is a corporation organized under the laws of the State of Texas.
- (2) Kleinheinz Capital Partners LDC is a Cayman Islands limited duration company.
- (3) John Kleinheinz is a U.S. citizen.
- (4) Global Undervalued Securities Master Fund, L.P. is a Cayman Islands exempted limited partnership.
- (5) Global Undervalued Securities Fund, L.P. is a Delaware limited partnership.
- (6) Global Undervalued Securities Fund (QP), L.P. is a Delaware limited partnership.
- (7) Global Undervalued Securities Fund, Ltd. is a Cayman Islands exempted company.

Item 2(d) Title of Class of Securities.

Common Stock, par value \$0.0001 per share

Item 2(e) CUSIP Number.

45685K102

Item 3 If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
 - (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
 - (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
 - (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
 - (e) An investment advisor in accordance with §240.13d-1(b)(1)(ii)(E).
 - (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F).
 - (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G).
-

- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3).
- (j) Group, in accordance with §240.13d-1(b)(1)(ii)(J).

Item 4 Ownership.

- (a) The Reporting Persons may be deemed the beneficial owners of 2,567,480 shares of Common Stock held by the Master Fund (consisting of 2,067,480 shares of Common Stock and warrants exercisable to purchase 500,000 shares of Common Stock).
- (b) The Reporting Persons may be deemed the beneficial owners of 12.6% of the outstanding shares of Common Stock. The percentage is determined by dividing 2,567,480 by the sum of (i) 19,941,095, which is the number of shares of Common Stock outstanding as of November 9, 2010, as disclosed by the Issuer on its Form 10-Q filed on November 10, 2010 and (ii) 500,000, which is the number of warrants exercisable to purchase shares of Common Stock held by the Reporting Persons.
- (c) The Reporting Persons have the sole power to vote and dispose of the 2,567,480 shares of Common Stock beneficially owned.

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 owners of more than five percent of the class of securities, check the following .

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.

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 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.

Exhibits Exhibit 99.1

Joint Filing Agreement, dated February 14, 2011, by and among the Reporting Persons.

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: February 14, 2011

KLEINHEINZ GLOBAL UNDERVALUED SECURITIES
MASTER FUND, L.P.

By: Global Undervalued Securities Fund, L.P., its general
partner

By: Kleinheinz Capital Partners, Inc., its investment
manager

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: President

KLEINHEINZ UNDERVALUED SECURITIES FUND, L.P.

By: Kleinheinz Capital Partners, Inc., its investment
manager

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: President

KLEINHEINZ UNDERVALUED SECURITIES FUND (QP),
L.P.

By: Kleinheinz Capital Partners, Inc., its investment
manager

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: President

KLEINHEINZ UNDERVALUED SECURITIES FUND, LTD.

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: Director

KLEINHEINZ CAPITAL PARTNERS, INC.

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: President

KLEINHEINZ CAPITAL PARTNERS LDC

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: Managing Director

By: /s/ John B. Kleinheinz
John B. Kleinheinz

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the undersigned agree to the joint filing on behalf of each of them of a Statement on Schedule 13G (including any and all amendments thereto) with respect to the Common Stock, par value \$0.0001 par value, of Infusystem Holdings, Inc., and further agree that this Joint Filing Agreement shall be included as an Exhibit to such joint filings.

The undersigned further agree that each party hereto is responsible for the timely filing of such Statement on Schedule 13G and any amendments thereto, and for the accuracy and completeness of the information concerning such party contained therein; provided, however, that no party is responsible for the accuracy or completeness of the information concerning any other party, unless such party knows or has reason to believe that such information is inaccurate.

This Joint Filing Agreement may be signed in counterparts with the same effect as if the signature on each counterpart were upon the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of February 14, 2011.

KLEINHEINZ GLOBAL UNDERVALUED SECURITIES
MASTER FUND, L.P.

By: Global Undervalued Securities Fund, L.P., its general
partner

By: Kleinheinz Capital Partners, Inc., its investment
manager

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: President

KLEINHEINZ UNDERVALUED SECURITIES FUND, L.P.

By: Kleinheinz Capital Partners, Inc., its investment
manager

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: President

KLEINHEINZ UNDERVALUED SECURITIES FUND (QP),
L.P.

By: Kleinheinz Capital Partners, Inc., its investment
manager

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: President

KLEINHEINZ UNDERVALUED SECURITIES FUND, LTD.

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: Director

KLEINHEINZ CAPITAL PARTNERS, INC.

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: President

KLEINHEINZ CAPITAL PARTNERS LDC

By: /s/ John B. Kleinheinz
Name: John B. Kleinheinz
Title: Managing Director

By: /s/ John B. Kleinheinz
John B. Kleinheinz