# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

### FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

## **INFUSYSTEM HOLDINGS, INC.**

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

20-3341405 (IRS Employer Identification No.)

InfuSystem Holdings, Inc. 31700 Research Park Drive Madison Heights, Michigan 48071 (Address of Principal Executive Offices)(Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class to be so registered Common stock, \$0.0001 par value per share Preferred Share Purchase Rights

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended, and is effective pursuant to General Instruction A.(c), please check the following box. × Name of each exchange on which each class is to be registered NYSE Amex LLC

NYSE Amex LLC

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended, and is effective pursuant to General Instruction A.(d), please check the following box.

Securities Act registration statement file number to which this form relates: (If applicable)

Securities to be registered pursuant to Section 12(g) of the Act: None.

#### **Explanatory Note**

This Registration Statement on Form 8–A is being filed to change the registration of the common stock, par value \$0.0001 per share (the "Common Stock"), of InfuSystem Holdings, Inc., a Delaware corporation (the "Company") and the preferred share purchase rights (the "Rights") entitling each registered holder thereof to purchase from the Company a unit consisting of one one-thousandth of a share of Series A Junior Participating Preferred Shares, par value \$0.0001 per share, of the Company, from Section 12(g) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), to Section 12(b) under the Exchange Act in connection with the listing of the Common Stock and the Rights on the NYSE Amex LLC (the "NYSE Amex"). The Rights are currently attached to the shares of Common Stock and not separately traded. The Common Stock and the Rights are currently listed for quotation on the Over–the–Counter Bulletin Board (the "OTCBB") under the symbol "INHI.OB". The Company anticipates that the listing of the Common Stock and the Rights on the OTCBB will be terminated following the closing of trading on the OTCBB on December 22, 2010 and will commence trading on the NYSE Amex at the opening of trading on the NYSE Amex on December 23, 2010 under the symbol "INFU".

#### Item 1. Description of Registrant's Securities to be Registered

The description of the Common Stock to be registered hereby is set forth under the caption "Description of Securities" in (i) the prospectus included in the Registration Statement (Registration No. 333-129035) on Form S-1 (as amended, the "Registration Statement") originally filed with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on October 14, 2005, (ii) the related final form of the prospectus filed with the Commission pursuant to Rule 424(b) under the Securities Act on April 12, 2006 and (iii) the related Registration Statement on Form 8-A filed with the Commission on April 6, 2006, and such descriptions are incorporated herein by reference. The description of the Rights to be registered hereby is set forth under the caption "Description of the Securities to be Registered" in Item 1 of the Registrant's Registration Statement on Form 8-A filed with the Commission by reference.

#### Item 2. Exhibits

- 3.1 Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-129035) filed on October 14, 2005, and incorporated by reference herein)
- 3.2 Certificate of Amendment to Amended and Restated Certificate of Incorporation (filed as Exhibit 3.7 to the Registrant's Current Report on Form 8-K/A filed December 6, 2007, and incorporated by reference herein)
- 3.3 Amended and Restated By-laws (filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed January 22, 2009, and incorporated by reference herein)
- 4.1 Specimen Common Stock Certificate (filed as Exhibit 4.2 to Amendment No. 3 to Registrant's Registration Statement on Form S-1 (File No. 333-129035) filed on March 3, 2006, and incorporated by reference herein)
- 4.2 Rights Agreement between the Company and Mellon Investor Services, LLC, dated November 12, 2010 (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on November 12, 2010, and incorporated by reference herein)

#### SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

#### INFUSYSTEM HOLDINGS, INC.

Date: December 21, 2010

/s/ SEAN MCDEVITT

By: Name: Sean McDevitt Title: Chief Executive Officer and Chairman

### Exhibit Index

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-129035) filed on October 14, 2005, and incorporated by reference herein)
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation (filed as Exhibit 3.7 to the Registrant's Current Report on Form 8-K/A filed December 6, 2007, and incorporated by reference herein)
3.3	Amended and Restated By-laws (filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed January 22, 2009, and incorporated by reference herein)
4.1	Specimen Common Stock Certificate (filed as Exhibit 4.2 to Amendment No. 3 to Registrant's Registration Statement on Form S-1 (File No. 333-129035) filed on March 3, 2006, and incorporated by reference herein)
4.2	Rights Agreement between the Company and Mellon Investor Services, LLC, dated November 12, 2010 (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on November 12, 2010, and incorporated by reference herein)