

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**FORM 8-A/A
Amendment No. 1**

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

OSI SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

California
(State of incorporation or organization)

**12525 Chadron Avenue
Hawthorne, California**
(Address of principal executive offices)

33-0238801
(I.R.S. Employer Identification No.)

90250
(Zip Code)

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

Title of each class
to be so registered

NONE

Name and exchange on which
each class is to be registered

NONE

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General instruction A.(c), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), 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:

Preferred Share Purchase Rights
(Title of Class)

INFORMATION REQUIRED IN REGISTRATION STATEMENT

The undersigned registrant hereby amends the Registration Statement on Form 8-A filed by the registrant with the Securities and Exchange Commission on August 1, 2000 as set forth below.

ITEM 1. Description of Registrant's Securities to be Registered.

On July 31, 2000, the Board of Directors of OSI Systems, Inc. (the "Company") declared a dividend of one preferred share purchase right (a "Right") for each outstanding share of common stock, without par value (the "Common Shares") of the Company. The dividend is payable to shareholders of record on August 17, 2000. Each Right entitles the registered holder to purchase from the Company one one-thousandth of a share of Series A Participating Preferred Stock, without par value of the Company at a price of \$100 per one one-thousandth of a Preferred Share, subject to adjustment. The description and terms of the Rights are set forth in a Rights Agreement (the "Rights Agreement") between the Company and U.S. Stock Transfer Corporation, as Rights Agent (the "Rights Agent"). Capitalized terms used and not defined herein have the meanings given to them in the Rights Agreement.

On December 21, 2004, the Company and the Rights Agent entered into the First Amendment to the Rights Agreement ("Amendment"), pursuant to which the terms of the outstanding Rights were amended. Section 1(a) of the Rights Agreement was amended to reduce the maximum amount of Common Shares that a person or group can acquire before the Rights Agreement is triggered. The Amendment provides that a distribution under the Rights Agreement will occur, with certain exceptions, only if a person or group becomes the beneficial owner of more than 10% of the Company's Common Shares. In determining the 10% ownership under the Rights Agreement, shareholders who report or are permitted to report such ownership on Schedule 13G under the Securities Exchange Act of 1934, as amended, will be excluded.

The Amendment, specifying the terms of the Rights, is attached hereto as Exhibit 4.2. The foregoing description is qualified in its entirety by reference to the description of the Rights and their terms set forth in the Rights Agreement and the Amendment, which are incorporated herein by reference.

ITEM 2. Exhibits.

EXHIBIT NUMBER	DESCRIPTION
4.1	Rights Agreement, dated as of July 31, 2000, by and between OSI Systems, Inc. and U.S. Stock Transfer Corporation, as Rights Agent (incorporated by reference to Exhibit 1 to the Registrant's Registration Statement on Form 8-A filed on August 1, 2000).
4.2	First Amendment to Rights Agreement, dated as of December 21, 2004, by and between OSI Systems, Inc. and U.S. Stock Transfer Corporation, as Rights Agent.

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, thereunto duly authorized.

(Registrant) **OSI SYSTEMS, INC.**

Date: December 23, 2004

By: /s/ DEEPAK CHOPRA

Deepak Chopra
President & Chief Executive Officer

OSI SYSTEMS, INC.

INDEX TO EXHIBITS

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4.2	First Amendment to Rights Agreement, dated as of December 21, 2004, by and between OSI Systems, Inc. and U.S. Stock Transfer Corporation, as Rights Agent.

AMENDMENT NO. 1 TO RIGHTS AGREEMENT

AMENDMENT NO. 1, dated December 21, 2004, to Rights Agreement (the "Rights Agreement"), dated July 31, 2000, between OSI Systems, Inc., a California corporation ("Company"), and U.S. Stock Transfer Corporation, as rights agent (the "Rights Agent"). The parties agree as follows:

1. Capitalized terms not otherwise defined herein will have the respective meanings given them in the Rights Agreement.
2. Section 1(a) of the Rights Agreement is amended in its entirety to read as follows:

"Acquiring Person" shall mean any Person (as such term is hereinafter defined) who or which, together with all Affiliates and Associates of such Person, shall be the Beneficial Owner (as such term is hereinafter defined) of 10% or more of the Common Shares of the Company then outstanding, but shall not include the Company, any Subsidiary (as such term is hereinafter defined) of the Company, any employee benefit plan of the Company or any Subsidiary of the Company, any entity holding Common Shares for or pursuant to the terms of any such plan or any Person who or which is the Beneficial Owner of 10% or more of the Common Shares of the Company then outstanding on the date of this Agreement, until such time hereafter as any of such Persons shall become the Beneficial Owner of any additional Common Shares of the Company (other than by means of a stock dividend, stock split or other pro rata distribution of securities of the Company and other than pursuant to any employee benefit plan of the Company or the exercise of options or other rights granted thereunder). Notwithstanding the foregoing, no Person shall become an "Acquiring Person" as the result of an acquisition of Common Shares by the Company which, by reducing the number of Common Shares of the Company outstanding, increases the proportionate number of Common Shares of the Company beneficially owned by such Person to 10% or more of the Common Shares of the Company then outstanding; provided, however, that, if a Person shall become the Beneficial Owner of 10% or more of the Common Shares of the Company then outstanding by reason of share purchases by the Company and shall, after such share purchases by the Company, become the Beneficial Owner of any additional Common Shares of the Company (other than by means of a stock dividend, stock split or other pro rata distribution of securities of the Company and other than pursuant to any employee benefit plan of the Company or the exercise of any options or other rights granted thereunder), then such Person shall be deemed to be an "Acquiring Person." Notwithstanding the foregoing, no Person shall become an "Acquiring Person" as the result of an acquisition of Common Shares of the Company if (x) such Person becomes the Beneficial Owner of 10% or more (but less than 20%) of the Common Shares of the Company then outstanding, and (y) such Person has reported or is permitted to report such ownership on Schedule 13G under the Exchange Act in effect on the date of the Agreement (or any comparable or successor report). Notwithstanding the foregoing, if the Board of Directors of the Company determines in good faith that a Person who would otherwise be an

“Acquiring Person,” as defined pursuant to the foregoing provisions of this paragraph (a), has become such inadvertently, and such Person divests as promptly as practicable a sufficient number of Common Shares so that such Person would no longer be an “Acquiring Person,” as defined pursuant to the foregoing provisions of this paragraph (a), then such Person shall not be deemed to be an “Acquiring Person” for any purposes of this Agreement. For purposes of the computations contemplated by this Section 1(a), the outstanding Common Shares as of any given date shall be deemed to include the number of Common Shares actually outstanding on such date, plus the number of Common Shares not actually outstanding on such date of which the Person in question is or is deemed to be the Beneficial Owner on such date.

3. Except as set forth herein, the Rights Agreement remains in full force and effect.

IN WITNESS WHEREOF, the parties have signed this Amendment No. 1 as of the date first written above.

OSI SYSTEMS, INC.

U.S. STOCK TRANSFER CORPORATION

By: /s/ Victor Sze

By: /s/ Richard Brown

Name: Victor Sze
Its: Executive Vice President & General Counsel

Name: Richard Brown
Its: Vice President