UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

OSI SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

California (State of Incorporation) 33-0238801 (I.R.S. Employer Identification Number)

12525 Chadron Avenue Hawthorne, California 90250 (Address of Principal Executive Offices) (Zip Code)

2006 Equity Participation Plan (Full title of the plan)

Deepak Chopra President and Chief Executive Officer 12525 Chadron Avenue Hawthorne, California 90250 (310) 978-0516

(Name, address and telephone number for service)

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered
Common Stock, no par value per share

2,000,000

Amount to be Registered (1)

Proposed Maximum Proposed Maximum Amount of Registration Fee
Proposed Maximum Proposed Maximum Proposed Maximum Amount of Registration Fee
Proposed Maximum Proposed Maxi

- Plus such indeterminate number of additional shares of Common Stock as may be required in the event of a stock dividend, reverse stock split or combination of shares, recapitalization or other change in the Registrant's capital stock.
- (2) Estimated pursuant to Rule 457(h) under the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee, based upon the average of the high and low sales prices of the Registrant's Common Stock as reported on the Nasdaq Global Market on January 29, 2008.

INTRODUCTION

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 2,000,000 shares of the Common Stock of OSI Systems, Inc., to be issued pursuant to our company's 2006 Equity Participation Plan.

In accordance with Section E of the General Instructions to Form S-8, the Registration Statements on Form S-8 filed with the Securities and Exchange Commission on June 16, 2003 (File No. 333-106176) and February 9, 2005 (File No. 333-122674) are hereby incorporated by reference.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits

Exhibit Number	Description
4.1	2006 Equity Participation Plan (1)
5.1	Opinion of Loeb & Loeb LLP, Counsel to Company
23.1	Consent of Loeb & Loeb LLP (contained in Exhibit 5.1)
23.2	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
23.3	Consent of Moss Adams LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (included on signature page)
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⁽¹⁾ Previously filed with our Current Report on Form 8-K filed December 7, 2007.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant, OSI Systems, Inc., a corporation organized under the laws of the State of California, certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Hawthorne, California, as of January 30, 2008.

OSI SYSTEMS, INC.

By: /s/ ALAN EDRICK
Alan Edrick
Chief Financial Officer

POWER OF ATTORNEY

Each of the undersigned hereby constitutes and appoints Messrs. Alan Edrick, Chief Financial Officer, and Victor Sze, General Counsel, and each of them, as his attorneys-in-fact and agents, with full power of substitution and resubstitution for him or her in any and all capacities, to sign any and all amendments or post-effective amendments to this Registration Statement, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto each of such attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary in connection with such matters and hereby ratifying and confirming all that each of such attorneys-in-fact and agents or his substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	<u>Title</u>	<u>Date</u>
/s/ DEEPAK CHOPRA Deepak Chopra	President, Chief Executive Officer (Principal Executive Officer) and Chairman of the Board	January 30, 2008
/s/ ALAN EDRICK Alan Edrick	Chief Financial Officer (Principal Financial and Accounting Officer)	January 30, 2008
/s/ AJAY MEHRA Ajay Mehra	Executive Vice President, President of Rapiscan Systems, and Director	January 30, 2008
/s/ STEVEN C. GOOD Steven C. Good	Director	January 30, 2008
/s/ MEYER LUSKIN Meyer Luskin	Director	January 30, 2008
/s/ CHAND R. VISWANATHAN Chand R. Viswanathan	Director	January 30, 2008
/s/ LESLIE E. BIDER Leslie E. Bider	Director	January 30, 2008

OSI SYSTEMS, INC. REGISTRATION STATEMENT ON FORM S-8

INDEX TO EXHIBITS

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LOEB & LOEB LLP 10100 SANTA MONICA BOULEVARD, SUITE 2200 LOS ANGELES, CA 90067 (310) 282-2000

January 29, 2008

OSI Systems, Inc. 12525 Chadron Avenue Hawthorne, California 90250

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as securities counsel to OSI Systems, Inc. (the "Company") in connection with the preparation and filing with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), of a Registration Statement on Form S-8 (the "Registration Statement") which relates to the issuance of 2,000,000 shares of Common Stock of the Company (the "Shares") pursuant to OSI Systems, Inc. 2006 Equity Participation Plan (the "Plan").

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

In connection with this opinion, we have examined and are familiar with originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records and other instruments as we have deemed necessary or appropriate as a basis for the opinions set forth herein, including (i) the Registration Statement of the Company filed with the Securities and Exchange Commission; (ii) the Articles of Incorporation and the Bylaws of the Company; (iii) the form of Common Stock Certificate; (v) copies of certain resolutions adopted by the Board of Directors of the Company relating to the filing of the Registration Statement and any amendments of supplements thereto and related matters; and (vi) such other documents as we have deemed necessary or appropriate as a basis for the opinions set forth below.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such latter documents. In making our examination of documents executed by parties other than the Company, we have assumed that such parties had the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and execution and delivery by such parties of such documents and the validity and binding effect thereof. As to any facts material to the opinions expressed herein which were not independently established or verified, we have relied upon oral or written statements and representations of officers and other representatives of the Company and others.

Members of our firm are admitted to the bar in the State of California, and we do not express any opinion as to the laws of any jurisdiction other than the corporate laws of the State of California and the laws of the United States of America to the extent referred to specifically herein.

Based on the foregoing, it is our opinion that, subject to effectiveness with the Securities and Exchange Commission of the Registration Statement and to registration or qualification under the securities laws of the states in which securities may be sold, the Shares are duly and validly authorized and, when issued, will constitute legally issued, fully paid and nonassessable shares of Common Stock of the Company.

We consent to the use of our name in the Registration Statement, and to the filing of this opinion as an exhibit to the Registration Statement. By giving you this opinion and consent, we do not admit that we are experts with respect to any part of the Registration Statement within the meaning of the term "expert" as used in Section 11 of the Securities Act or the rules and regulations promulgated thereunder, nor do we admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Sincerely,

LOEB & LOEB LLP

/s/ LOEB & LOEB LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated September 28, 2005, relating to the consolidated financial statements and financial statement schedule of OSI Systems, Inc. and subsidiaries for the year ended June 30, 2005 appearing in the Annual Report on Form 10-K of OSI Systems, Inc. for the year ended June 30, 2007 and incorporated by reference in Registration Statements No. 333-106176 and No. 333-122674 on Form S-8.

/s/ DELOITTE & TOUCHE LLP Los Angeles, California January 29, 2008

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our reports dated September 11, 2007 relating to the financial statements and financial statement schedule of OSI Systems, Inc. (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the Company's changes in accounting for pension and postretirement benefits), and management's assessment on the effectiveness of internal control over financial reporting, and the effectiveness of internal controls over financial reporting, appearing in the Annual Report on Form 10-K of OSI Systems, Inc. for the year ended June 30, 2007.

/s/ MOSS ADAMS LLP Los Angeles, California January 29, 2008