

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 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. 1)1

OSI SYSTEMS, INC.  
(Name of Issuer)

COMMON STOCK  
(Title of Class of Securities)

671044105  
(CUSIP Number)

10/31/00  
(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)

1The 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 (the "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.)

[Continued on the following pages]

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

Wellington Management Company, LLP  
04-2683227

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2. CHECK THE APPROPRIATE BOX IF THE MEMBER OF A GROUP  
(a) ☐  
(b) ☐

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3. SEC USE ONLY

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4. CITIZENSHIP OR PLACE OF ORGANIZATION  
Massachusetts

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NUMBER OF                      5. SOLE VOTING POWER  
SHARES                                      0  
BENEFICIALLY                      -----  
OWNED BY                      6. SHARED VOTING POWER  
EACH                                      135,900  
REPORTING                      -----  
PERSON                      7. SOLE DISPOSITIVE POWER

WITH

0

8. SHARED DISPOSITIVE POWER  
135,900

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

135,900

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

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
1.45%

12. TYPE OF REPORTING PERSON  
IA

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Item 1(a). Name of Issuer:

OSI SYSTEMS, INC.

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

12525 Chadron Avenue  
Hawthorne CA 90250

Item 2(a). Name of Person Filing:

Wellington Management Company, LLP (`WMC`)

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

75 State Street  
Boston, Massachusetts 02109

Item 2(c). Citizenship:

Massachusetts

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

COMMON STOCK

Item 2(e). CUSIP Number:

671044105

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 Act.
- (b) [ ] Bank as defined in Section 3(a)(6) of the Act.
- (c) [ ] Insurance Company as defined in Section 3(a)(19) of  
the Act.

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(d) [ ] Investment Company registered under Section 8 of the  
Investment Company Act.

(e) [ X ] 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); see item 7;

- (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).

If this statement is filed pursuant to Rule 13d-1(c),  
check this box [ ]

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: WMC, in its capacity as investment adviser, may be deemed to beneficially own 135,900 shares of the Issuer which are held of record by clients of WMC.
- (b) Percent of class: 1.45%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or to direct the vote 0
  - (ii) Shared power to vote or to direct the vote 135,900
  - (iii) Sole power to dispose or to direct the disposition of 0
  - (iv) Shared power to dispose or to direct the disposition of 135,900

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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 person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following

[X].

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

The securities as to which this Schedule is filed by WMC, in its capacity as investment adviser, are owned of record by clients of WMC. Those clients have the right to receive, or the power to direct the receipt of, dividends from, or the proceeds from the sale of, such securities. No such client is known to have such right or power with respect to more than five percent of this class of securities, except as follows:

None

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. This schedule is not being filed Pursuant to Rule 13d-1(b)(1)(ii)(J) or Rule 13d-1(d).

Item 9. Notice of Dissolution of Group.

Not Applicable.

Item 10. Certification.

- (a) The following certification shall be included if the statement

is filed pursuant to Rule 13d-1(b):

"By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the

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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.

By:--//Brian P. Hillery/--  
Name: Brian P. Hillery  
Title: Assistant Vice President  
Date: November 29, 2000

\* Signed pursuant to a Power of Attorney dated January 15, 1997 and filed with the SEC on January 24, 1997.