

DASSAULT SYSTEMES SA
Form 6-K
March 11, 2008

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER

PURSUANT TO RULE 13a-16 OR 15d-16 OF
THE SECURITIES EXCHANGE ACT OF 1934

Report on Form 6-K dated March 11, 2008

Commission File No. 0-28578

DASSAULT SYSTEMES S.A.

(Name of Registrant)

9, Quai Marcel Dassault, B.P. 310, 92156 Suresnes Cedex, France
(Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):
Yes No

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):
Yes No

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934:
Yes No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-_____

ENCLOSURES:

Dassault Systemes S.A. is furnishing under cover of Form 6-K a press release dated March 11, 2008, reporting the company's repurchase of its own shares during the period from February 29, 2008 to March 10, 2008.

Suresnes, 11 March 2008

DISCLOSURE OF TRADING IN OWN SHARES

(repurchase program decided by the general meeting of shareholders on June 6, 2007)

Issuer: DASSAULT SYSTEMES S.A.

Type of securities: ordinary shares

Period: from 29 February 2008 to 10 March 2008

Purchases effected during the period

| Date | Transaction | Number of shares | Weighted average unit price | Amounts of transactions |
|------------|-------------|------------------|-----------------------------|-------------------------|
| 29/02/2008 | Purchase | 63 903 | 36,11 € | 2 307 537,33 € |
| 03/03/2008 | Purchase | 149 071 | 35,95 € | 5 359 102,45 € |
| 04/03/2008 | Purchase | 100 000 | 35,69 € | 3 569 000 € |
| 05/03/2008 | Purchase | 100 000 | 35,79 € | 3 579 000 € |
| 06/03/2008 | Purchase | 100 000 | 35,86 € | 3 586 000 € |
| 07/03/2008 | Purchase | 100 000 | 35,79 € | 3 579 000 € |
| 10/03/2008 | Purchase | 120 000 | 37,01 € | 4 441 200 € |
| Total | Purchase | 732 974 | 36,05 € | 26 420 839,78 € |

During the period, the issuer has not dealt on derivative instruments and has not effected any purchase or sale upon exercise or maturity of derivative instruments.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DASSAULT SYSTEMES S.A.

Date: March 11, 2008

By: /s/ Thibault de Tersant
Name: Thibault de Tersant
Title: Senior EVP and Chief
Financial Officer