

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 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**

American Capital Agency Corp.

(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation
or organization)

26-1701984
(IRS Employer
Identification No.)

2 Bethesda Metro Center, 14th Floor
Bethesda, Maryland
(Address of principal executive offices)

20814
(Zip Code)

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

Title of each class
to be so registered
**8.000 % Series A Cumulative
Redeemable Preferred Stock,
Liquation Preference \$25.00 per Share**

Name of each exchange on which
each class is to be registered
The NASDAQ Global Select Market

If this Form 8-A relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is to become effective pursuant to General Instruction A.(c), please check the following box.

If this Form 8-A relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is to become effective pursuant to General Instruction A.(d), please check the following box.

Securities Act registration statement file number to which this form relates: **File No. 333-170374**

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

INFORMATION REQUIRED IN REGISTRATION STATEMENT

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

For a description of the securities being registered hereunder, reference is made to the information set forth under the heading "Description of the Series A Preferred Stock" in the Registrant's Prospectus Supplement dated March 29, 2012, as filed with the Securities and Exchange Commission (the "Commission") on April 2, 2012, pursuant to Rule 424(b) under the Securities Act of 1933 and under the headings "Description of Securities—Preferred Stock" and "—Restrictions on Ownership and Transfer of Our Capital Stock" in the accompanying prospectus that constitutes a part of the Registrant's Shelf Registration Statement on Form S-3 (File No. 333-170374), filed with the Commission on November 4, 2010, which information is incorporated herein by reference.

Item 2. Exhibits.

- *3.1 American Capital Agency Corp. Amended and Restated Certificate of Incorporation, as amended, incorporated herein by reference to Exhibit 3.1 of Form 10-Q for the quarter ended June 30, 2011 (File No. 001-34057), filed August 9, 2011.
- *3.2 American Capital Agency Corp. Second Amended and Restated Bylaws, as amended, incorporated herein by reference to Exhibit 3.2 of Form 10-K for the year ended December 31, 2011 (File No. 001-34057), filed February 23, 2012.
- *3.3 Certificate of Designations of 8.000% Series A Cumulative Redeemable Preferred Stock, incorporated herein by reference to Exhibit 3.1 of Form 8-K (File No. 001-34057), filed April 2, 2012.
- *4.1 Specimen 8.000% Series A Cumulative Redeemable Preferred Stock Certificate, incorporated herein by reference to Exhibit 4.1 of Form 8-K (File No. 001-34057), filed April 2, 2012.

* Fully or partly previously filed

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.

Dated: April 2, 2012

American Capital Agency Corp.

/s/ Samuel A. Flax

Samuel A. Flax

Executive Vice President and Secretary