The Securities and Exchange Commission has not necessarily reviewed the information in this filing and has not determined if it is accurate and complete.

The reader should not assume that the information is accurate and complete.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 FORM 13F

FORM 13F COVER PAGE

OMB APPROVAL

OMB 3235Number: 0006

Expires: Oct 31,
2018

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e: 23.8

Report for the Calendar Year or Quarter Ended: 03-31-2015 Check here if Amendment Amendment Number:

This Amendment (Check only one.): is a restatement.

adds new holdings entries.

Institutional Investment Manager Filing this Report: Name: American Capital Agency Corp

Address: 2 BETHESDA METRO CENTER 14TH

FLOOR

BETHESDA, MD 20814

Form 13F File

Number: 028-16063

The institutional investment manager filing this report and the person by whom it is signed hereby represent that the person signing the report is authorized to submit it, that all information contained herein is true, correct and complete, and that it is understood that all required items, statements, schedules, lists, and tables, are considered integral parts of this form.

Person Signing this Report on Behalf of Reporting Manager:

Name: Samuel A. Flax

Title: Executive Vice President and Secretary

Phone: 301-841-1405 Signature, Place, and Date of Signing:

Samuel A. Flax Bethesda, MD 05-07-2015 [Signature] [City, State] [Date]

Report Type (Check only one.):

13F HOLDINGS REPORT. (Check here if all holdings of this reporting manager are reported in this report.)

X 13F NOTICE. (Check here if no holdings reported are in this report, and all holdings are reported by other reporting manager(s).)

13F COMBINATION REPORT. (Check here if a portion of the holdings for this reporting manager are reported in this report and a portion are reported by other reporting manager(s).)

List of Other Managers Reporting for this Manager:

[If there are no entries in this list, omit this section.]

Form 13F

File Name

Number

American Capital Mortgage Management, LLC