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

ALCOA INC.

(Exact Name of Registrant as Specified in its Charter)

Pennsylvania (State or Other Jurisdiction of Incorporation)

390 Park Avenue New York, New York (Address of Principal Executive Offices) 25-0317820 (I.R.S. Employer Identification No.)

> 10022-4608 (Zip Code)

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

Title of each class to be so registered Depositary Shares, each representing a 1/10th ownership interest in a share of 5.375% Class B Mandatory Convertible Preferred Stock, Series 1 Name of each exchange on which each class is to be registered New York Stock Exchange

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

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

Securities Act registration statement file number to which this form relates: 333-197371

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

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

33-49997 on Form S-3.

The securities to be registered hereby are Depositary Shares, each representing a 1/10th interest in a share of 5.375% Class B Mandatory Convertible Preferred Stock, Series 1, par value of \$1.00 per share (the "Mandatory Convertible Preferred Stock") of Alcoa Inc. (the "Company"). The descriptions of the Depositary Shares and the underlying Mandatory Convertible Preferred Stock are contained in the Company's Prospectus, dated July 30, 2014, included in the Company's registration statement on Form S-3 (File No. 333-197371) under the captions "Description of Depositary Shares," "Description of Preferred Stock" and "Description of Common Stock" and the Company's Prospectus Supplement with respect to the Depositary Shares, dated September 16, 2014, under the captions "Description of Depositary Shares," "Description of Common Stock," and "Description of Mandatory Convertible Preferred Stock," and those sections are incorporated herein by reference.

Item 2.	Exhibits.
Exhibit No.	Description
3.1	Articles of Alcoa Inc., as amended effective May 6, 2013, incorporated by reference herein to Exhibit 3(a) to Alcoa Inc.'s Current Report on Form 8-K filed on May 8, 2013.
3.2	By-Laws of Alcoa Inc., as amended effective January 17, 2014, incorporated by reference herein to Exhibit 3 to Alcoa Inc.'s Current Report on Form 8-K filed on January 23, 2014.
4.1	Statement with Respect to Shares of Alcoa Inc. (as filed with the Bureau of Corporations of the Department of State of the Commonwealth of Pennsylvania on September 22, 2014), incorporated by reference herein to Exhibit 3.1 to Alcoa Inc.'s Current Report on Form 8-K filed on September 22, 2014.
4.2	Deposit Agreement, dated as of September 22, 2014, among Alcoa Inc., Computershare Trust Company, N.A. as depositary, registrar and transfer agent, Computershare Inc. and the holders from time to time of the depositary receipts described therein (including Form of Depositary Receipt), incorporated by reference herein to Exhibit 4.1 to Alcoa Inc.'s Current Report on Form 8-K filed on September 22, 2014.
4.3	Form of Depositary Receipt for the Depositary Shares (included as Exhibit A to Exhibit 4.2).
4.4	Form of Certificate for the 5.375% Class B Mandatory Convertible Preferred Stock, Series 1 (included as Exhibit A to Exhibit 4.1).
4.5	Form of Certificate for Shares of Common Stock, incorporated by reference herein to Exhibit 4(i) to Alcoa Inc.'s Registration Statement No.

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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 hereunto duly authorized.

Date: September 22, 2014

ALCOA INC.

By: /s/ Audrey Strauss

Audrey Strauss Executive Vice President, Chief Legal Officer and Secretary