UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT Under The Securities Act of 1933

ALCOA INC.

(Exact name of registrant as specified in its charter)

Pennsylvania (State of Incorporation) 25-0317820 (I.R.S. Employer Identification No.)

390 Park Avenue New York, New York 10022-4608 (Address of principal executive offices, including zip code)

2009 ALCOA STOCK INCENTIVE PLAN

(Full Title of the Plan)

J. Michael Schell
Executive Vice President - Business Development and Law
390 Park Avenue
New York, New York 10022-4608
(Name and address of agent for service)

Telephone number of agent for service (212) 836-2680

| definitions of "large acce | elerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b | -2 of the Exchange Act. (Check one): | |
|----------------------------|--|--------------------------------------|---|
| Large accelerated filer | \boxtimes | Accelerated filer | |
| Non-accelerated filer | (Do not check if a smaller reporting company) | Smaller reporting company | П |

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the

CALCULATION OF REGISTRATION FEE

| CAECULATION OF REGISTRATION FEE | | | | | | |
|--|-------------------|-----------|----------------|--------------|--|--|
| | | Proposed | Proposed | | | |
| | | Maximum | Maximum | | | |
| | Amount | Offering | Aggregate | Amount of | | |
| | to be | Price Per | Offering | Registration | | |
| Title of Securities to be Registered | Registered (1) | Share (2) | Price (2) | Fee (3) | | |
| Common stock, par value \$1.00 per share | 35,000,000 shares | \$ 10.085 | \$ 352,975,000 | \$ 19,696.01 | | |

- 1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers any additional securities that may be offered or issued pursuant to the 2009 Alcoa Stock Incentive Plan (the "2009 Plan") to prevent dilution as a result of adjustments for stock splits, stock dividends or similar transactions. Any shares covered by outstanding options or other equity awards that are forfeited, cancelled or expire after May 8, 2009 without the delivery of shares under the 2004 Alcoa Stock Incentive Plan, the Long Term Stock Incentive Plan of Aluminum Company of America, the Alcoa Stock Incentive Plan, the Reynolds Metals Company 1996 Nonqualified Stock Option Plan, the Reynolds Metals Company 1999 Nonqualified Stock Option Plan and the Cordant Technologies Inc. Amended and Restated 1996 Stock Award Plan, each as amended and restated from time to time, may be issued under the 2009 Plan.
- Estimated solely for the purpose of calculating the registration fee, based on the average of the high and low prices of shares of the Registrant's common stock reported on the New York Stock Exchange on May 8, 2009.
- Pursuant to Rule 457(p) under the Securities Act, all of the registration fee for this Registration Statement is being offset with the unused registration fee (\$55,673.63) that was previously paid in connection with the Registrant's Registration Statement No. 333-115717 (the "Prior Registration Statement") filed on May 21, 2004 in connection with the 2004 Alcoa Stock Incentive Plan (the "2004 Plan"). Upon shareholder approval of the 2009 Plan on May 8, 2009, the 2009 Plan replaced the 2004 Plan and no further awards will be made under the 2004 Plan. The 15,074,203 shares that have not been issued under the 2004 Plan and are not subject to issuance for outstanding awards under the 2004 Plan are being deregistered under the Prior Registration Statement.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Information required by Part I to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act and the Note to Part I of Form S-8.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Securities and Exchange Commission ("SEC") allows Alcoa to "incorporate by reference" in this Registration Statement the information in the documents that it files with the SEC, which means that Alcoa can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this Registration Statement, and information in documents that Alcoa files later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this Registration Statement. Alcoa incorporates by reference in this Registration Statement the documents listed below and any future filings that it may make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") until all of the securities that may be offered by this Registration Statement are sold, except that Alcoa is not incorporating by reference any information that is deemed to have been furnished and not filed in accordance with SEC rules.

- Alcoa's Annual Report on Form 10-K for the fiscal year ended December 31, 2008;
- Alcoa's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2009;
- Alcoa's Current Reports on Form 8-K (or Form 8-K/A) filed January 7, 2009, March 16, 2009, March 20, 2009 and March 24, 2009; and
- The description of Alcoa's common stock, par value \$1.00 per share ("Common Stock") contained in Alcoa's Registration Statement on Form S-3ASR (File No. 333-149623), filed March 10, 2008.

Alcoa will furnish without charge to you, upon written or oral request, a copy of any or all of the documents described above, except for exhibits to those documents, unless the exhibits are specifically incorporated by reference into those documents. Requests for copies should be addressed to:

Alcoa Inc. Attention: Investor Relations 390 Park Avenue New York, New York 10022-4608 Telephone: (212) 836-2674

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

The validity of the Common Stock to be issued in connection with the 2009 Plan will be passed upon by Thomas F. Seligson, Esq., Counsel of Alcoa. Mr. Seligson is paid a salary by Alcoa, is a participant in various benefit plans offered by Alcoa to employees of Alcoa generally and beneficially owns, or has rights to acquire, an aggregate of less than 1% of Alcoa's outstanding Common Stock.

Item 6. Indemnification of Directors and Officers.

Article V of the By-Laws of Alcoa provides that Alcoa shall indemnify, under specified circumstances, persons who were or are directors, officers or employees of Alcoa or who served or serve other business entities at the request of Alcoa. Under these By-Law provisions, a person who is wholly successful in defending a claim will be indemnified for any reasonable expenses. To the extent a person is not successful in defending a claim, reasonable expenses of the defense and any liability incurred are to be indemnified under these provisions only where independent legal counsel or another disinterested person selected by the board of directors determines that such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, the best interests of Alcoa, and in addition with respect to any criminal action or proceeding, had no reasonable cause to believe the conduct of such person was unlawful. Any expense incurred with respect to any claim may be advanced by Alcoa if the recipient agrees to repay such amount if it is ultimately determined that such recipient is not to be indemnified pursuant to Article V.

The foregoing By-Law provisions generally parallel Sections 1741 and 1745 of the Pennsylvania Business Corporation Law ("PBCL"). Section 1746 and the By-Laws both also provide that the indemnification provided for therein shall not be deemed exclusive of any other rights to which those seeking indemnification may otherwise be entitled.

Section 1746 of the PBCL and the By-Laws provide for increased indemnification protections for directors, officers and others. Indemnification may be provided by Pennsylvania corporations in any case except where the act or failure to act giving rise to the claim for indemnification is determined by a court to have constituted willful misconduct or recklessness.

Section 1713 of the PBCL also sets forth a framework whereby Pennsylvania corporations, with the approval of the shareholders, may limit the personal liability of directors for monetary damages except where the act or omission giving rise to a claim constitutes self-dealing, willful misconduct or recklessness. The section does not apply to a director's responsibility or liability under a criminal or tax statute and may not apply to liability under Federal statutes, such as the Federal securities laws.

Alcoa's Articles of Incorporation and By-Laws were amended by the shareholders to implement the increased protections made available to directors under the PBCL as described in the preceding paragraph. Article VIII of the By-Laws provides that, except as

prohibited by law, every director of Alcoa shall be entitled as of right to be indemnified by Alcoa for expenses and any and all liability paid or incurred by such person by reason of such person being or having been a director of Alcoa. Expenses incurred with respect to any claim may be advanced by Alcoa, subject to certain exceptions. The shareholders have also approved a form of indemnity agreement. Alcoa has entered into such an indemnity agreement with each of its current directors and officers.

Alcoa has purchased a directors and officers liability insurance policy with an aggregate limit of \$450 million for liability of directors and officers. The insurance also includes within that limit \$250 million of coverage, subject to a deductible, for reimbursement to Alcoa for indemnification provided to directors and officers. The policy has an expiration date of October 1, 2009 and provides liability insurance and reimbursement coverage for Alcoa, and its directors and officers that is permitted by the laws of Pennsylvania.

The Articles of Incorporation provide that except as prohibited by law, Alcoa may indemnify any person who is or was a director, officer, employee or agent of Alcoa or is or was serving at the request of Alcoa as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including, without limitation, any employee benefit plan, and may take such steps as may be deemed appropriate by the board of directors, including purchasing and maintaining insurance, entering into contracts, including, without limitation, contracts of indemnification between Alcoa and its directors and officers, creating a trust fund, granting security interests or using other means, including, without limitation, a letter of credit to ensure the payment of such amounts as may be necessary to effect such indemnification. The By-Laws provide for indemnification of such persons to the fullest extent permitted by law.

The Articles of Incorporation also provide that to the fullest extent that the laws of the Commonwealth of Pennsylvania permit elimination or limitation of the liability of directors, no director of Alcoa shall be personally liable for monetary damages for any action taken, or any failure to take any action.

For the undertaking with respect to indemnification, see Item 9 herein.

Item 7. Exemption From Registration Claimed.

Not Applicable.

Item 8. Exhibits.

The following exhibits are filed with or incorporated by reference into this registration statement (numbering corresponds to Exhibit Table in Item 6.01 of Regulation S-K).

Exhibit Number Description

- 4(a) Articles of Incorporation of Alcoa, as amended (incorporated by reference to Exhibit 3(a) to Alcoa's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2000).
- 4(b) By-Laws of Alcoa, as amended (incorporated by reference to Exhibit 3 to Alcoa's Current Report on Form 8-K filed on September 20, 2007).

- 4(c) 2009 Alcoa Stock Incentive Plan (incorporated by reference to Attachment C to Alcoa's Definitive Proxy Statement on Form DEF 14A filed March 16, 2009).
- 5 Opinion of Thomas F. Seligson, Counsel of Alcoa.
- 15 Letter regarding unaudited interim financial information.
- 23(a) Consent of PricewaterhouseCoopers LLP.
- 23(b) Consent of Counsel (included as part of Exhibit 5).
- Power of Attorney of certain directors of Alcoa (incorporated by reference to Exhibit 24 to Alcoa's Annual Report on Form 10-K for the year ended December 31, 2008).

Item 9. Undertakings.

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended;
- (ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and
- (iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, *however*, that paragraphs (i) and (ii) do not apply if the Registration Statement is on Form S-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934, as amended), that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 6 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, as amended, and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Pittsburgh, the Commonwealth of Pennsylvania, on this 11th day of May, 2009.

ALCOA INC. (Registrant)

By /s/ Tony R. Thene

Tony R. Thene
Vice President and Controller
(Principal Accounting Officer)

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|--|--|--------------|
| /s/ Klaus Kleinfeld Klaus Kleinfeld | President and Chief Executive Officer; Director (Principal Executive Officer) | May 11, 2009 |
| /s/ Charles D. McLane, Jr. Charles D. McLane, Jr. | Executive Vice President and Chief Financial Officer (Principal Financial Officer) | May 11, 2009 |
| /s/ Tony R. Thene Tony R. Thene | Vice President and Controller (Principal Accounting Officer) | May 11, 2009 |

Alain J. P. Belda, Kathryn S. Fuller, Carlos Ghosn, Joseph T. Gorman, Judith M. Gueron, Michael G. Morris, E. Stanley O'Neal, James W. Owens, Patricia F. Russo, Henry B. Schacht, Ratan N. Tata, Franklin A. Thomas and Ernesto Zedillo, each as a Director, on May 11, 2009, by Donna C. Dabney, their attorney-infact.

/s/ Donna C. Dabney

Donna C. Dabney Attorney-in-fact

INDEX TO EXHIBITS

| Exhibit <u>Number</u> 4(a) | <u>Description</u> Articles of Incorporation of Alcoa, as amended (incorporated by reference to Exhibit 3(a) to Alcoa's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2000). |
|----------------------------------|---|
| 4(b) | By-Laws of Alcoa, as amended (incorporated by reference to Exhibit 3 to Alcoa's Current Report on Form 8-K filed on September 20, 2007). |
| 4(c) | 2009 Alcoa Stock Incentive Plan (incorporated by reference to Attachment C to Alcoa's Definitive Proxy Statement on Form DEF 14A filed March 16, 2009). |
| 5 | Opinion of Thomas F. Seligson, Counsel of Alcoa. |
| 15 | Letter regarding unaudited interim financial information. |
| 23(a) | Consent of PricewaterhouseCoopers LLP. |
| 23(b) | Consent of Counsel (included in Exhibit 5). |
| 24 | Power of Attorney of certain directors of Alcoa (incorporated by reference to Exhibit 24 to Alcoa's Annual Report on Form 10-K for the year ended December 31, 2008). |

May 11, 2009

Alcoa Inc. 390 Park Avenue New York, New York 10022-4608

Ladies and Gentlemen:

This opinion is furnished in connection with the registration by Alcoa Inc. (the "Company") pursuant to a Registration Statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "1933 Act"), of an aggregate of 35,000,000 shares of common stock, par value \$1.00 per share ("Common Stock"), of the Company, that are to be offered and sold by the Company through the 2009 Alcoa Stock Incentive Plan (the "2009 Plan") (the "Shares").

As a Counsel of the Company, I am of the opinion, based upon my familiarity with the affairs of the Company and upon my examination of the law and pertinent documents, that the Shares, when issued and sold pursuant to the 2009 Plan, will be legally issued, fully paid and non-assessable shares of Common Stock of the Company.

I hereby consent to the filing of this opinion with the Securities and Exchange Commission (the "Commission") as an Exhibit to the Registration Statement with respect to the Shares under the 1933 Act. In giving this consent, I do not admit that I am in the category of persons whose consent is required under Section 7 of the 1933 Act or the Rules and Regulations of the Commission issued thereunder.

Very truly yours,

/s/ Thomas F. Seligson Thomas F. Seligson Counsel May 11, 2009

Securities and Exchange Commission 100 F Street, N.E. Washington, DC 20549

Commissioners:

We are aware that our report dated April 23, 2009, on our review of interim financial information of Alcoa Inc. and its subsidiaries (the "Company") for the three-month periods ended March 31, 2009 and 2008 and included in the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2009, is incorporated by reference in this Registration Statement on Form S-8 dated May 11, 2009.

Very truly yours,

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 13, 2009 relating to the financial statements, financial schedule, and the effectiveness of internal control over financial reporting, which appear in the Annual Report on Form 10-K for the year ended December 31, 2008 of Alcoa Inc. and its subsidiaries.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania May 11, 2009