

ARCH CAPITAL GROUP LTD.  
Form SC 13G/A  
February 14, 2006

**UNITED STATES  
SECURITIES AND EXCHANGE  
COMMISSION**  
Washington, D.C. 20549  
**SCHEDULE 13G**

**Under the Securities Exchange Act of 1934  
(Amendment No. 1)\***

**ARCH CAPITAL GROUP LTD.**

(Name of Issuer)

**Common Stock \$.01 par value per share**

(Title of Class of Securities)

**G0450A105**

(CUSIP Number)

**December 31, 2005**

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 ( Act ) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. G0450A105

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)  
Cascade Investment, L.L.C.
  2. Check the Appropriate Box if a Member of a Group (See Instructions)
    - (a)
    - (b)
  3. SEC Use Only
  4. Citizenship or Place of Organization  
State of Washington
- |   |    |                                     |  |
|---|----|-------------------------------------|--|
| Number of<br>Shares<br>Beneficially<br>Owned by<br>Each<br>Reporting<br>Person With | 5. | Sole Voting Power<br>2,368,653      |  |
|   | 6. | Shared Voting Power<br>-0-          |  |
|   | 7. | Sole Dispositive Power<br>2,368,653 |  |
|   | 8. | Shared Dispositive Power<br>-0-     |  |
9. Aggregate Amount Beneficially Owned by Each Reporting Person  
2,368,653
  10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
  11. Percent of Class Represented by Amount in Row (9)  
6.7%
  12. Type of Reporting Person (See Instructions)  
OO

CUSIP No. G0450A105

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)  
William H. Gates III
  2. Check the Appropriate Box if a Member of a Group (See Instructions)
    - (a)
    - (b)
  3. SEC Use Only
  4. Citizenship or Place of Organization  
United States of America
- |   |    |                                     |  |
|---|----|-------------------------------------|--|
| Number of<br>Shares<br>Beneficially<br>Owned by<br>Each<br>Reporting<br>Person With | 5. | Sole Voting Power<br>2,368,653      |  |
|   | 6. | Shared Voting Power<br>-0-          |  |
|   | 7. | Sole Dispositive Power<br>2,368,653 |  |
|   | 8. | Shared Dispositive Power<br>-0-     |  |
9. Aggregate Amount Beneficially Owned by Each Reporting Person  
2,368,653
  10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
  11. Percent of Class Represented by Amount in Row (9)  
6.7%
  12. Type of Reporting Person (See Instructions)  
IN

Item 1.

- (a) Name of Issuer  
Arch Capital Group Ltd. (the Issuer )
- (b) Address of Issuer's Principal Executive Offices  
Wessex House, 45 Reid Street, Hamilton HM 12, Bermuda

Item 2.

- (a) Name of Person Filing  
(1) Cascade Investment, L.L.C. ( Cascade )  
  
(2) William H. Gates III
- (b) Address of Principal Business Office or, if none, Residence  
(1) 2365 Carillon Point, Kirkland, Washington 98033  
  
(2) One Microsoft Way, Redmond, Washington 98052
- (c) Citizenship  
(1) Cascade is a limited liability company organized under the laws of the State of Washington.  
  
(2) William H. Gates III is a citizen of the United States of America.
- (d) Title of Class of Securities  
Common Stock, \$.01 par value per share
- (e) CUSIP Number  
G0450A105

Item 3.

- If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:
- (a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
  - (b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
  - (c)  Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
  - (d)  Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
  - (e)  An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
  - (f)  An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
  - (g)  A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
  - (h)  A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
  - (i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
  - (j)  Group, in accordance with §240.13d-1(b)(1)(ii)(J).
- Not Applicable

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- |     |  |   |
|-----|--|---|
| (a) | Amount beneficially owned:                   |   |
|     |  | 2,368,653*  |
| (b) | Percent of class:                            |   |
|     |  | 6.7%  |
| (c) | Number of shares as to which the person has: |   |
|     | (i)  | Sole power to vote or to direct the vote                              |
|     | (ii)   | 2,368,653*<br>Shared power to vote or to direct the vote              |
|     | (iii)  | -0-<br>Sole power to dispose or to direct the disposition of          |
|     | (iv)   | 2,368,653*<br>Shared power to dispose or to direct the disposition of |
|     |  | -0-   |

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\* All shares held by Cascade may be deemed to be beneficially owned by William H. Gates III as the sole member of Cascade.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following .

Not Applicable

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person

Not Applicable

Item 8. Identification and Classification of Members of the Group

Not Applicable

Item 9. Notice of Dissolution of Group

Not Applicable

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

**SIGNATURE**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 14, 2006

CASCADE INVESTMENT, L.L.C.

By */s/ Michael Larson*  
Michael Larson, Business Manager

WILLIAM H. GATES III

*/s/ Michael Larson*  
William H. Gates III, by Michael Larson as attorney in fact\*

**JOINT FILING AGREEMENT**

We, the signatories of the statement to which this Joint Filing Agreement is attached, hereby agree that such statement is filed, and any amendments thereto filed by either or both of us will be filed, on behalf of each of us.

DATES: February 14, 2006

CASCADE INVESTMENT, L.L.C.

By: */s/ Michael Larson*  
Michael Larson, Business Manager

WILLIAM H. GATES III

*/s/ Michael Larson*  
William H. Gates III, by Michael Larson as attorney in fact\*

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\* Duly authorized under Special Power of Attorney appointing Michael Larson attorney-in-fact, dated February 4, 2005, by and on behalf of William H. Gates III, filed as Exhibit 99.3 to Cascade Investment, L.L.C.'s Amendment No. 5 to Schedule 13G with respect to Canadian National Railway Company on February 11, 2005, SEC File No. 005-48661, and incorporated by reference herein.