ARCH COAL INC Form SC 13G February 11, 2016

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

| | Arch Coal, Inc | |
|---|---|---|
| | (Name of Issuer) | |
| (| common stock | |
| (Title o | of Class of Securities) |) |
| | 039380308 | |
| , | (CUSIP Number) October 26, 202 | 15 |
| (Date of Event Wh | hich Requires Filing of | f this Statement) |
| Check the appropriate box to desi | ignate the rule pursuan | nt to which this |
| [X] Rule 13d-1(b) | | |
| [_] Rule 13d-1(c) | | |
| [_] Rule 13d-1(d) | | |
| *The remainder of this cover page initial filing on this form with and for any subsequent amendment the disclosures provided in a page | h respect to the subject containing information | ct class of securities, |
| The information required in the redeemed to be "filed" for the purp Act of 1934 ("Act") or otherwise of the Act but shall be subject to see the Notes). | pose of Section 18 of t subject to the liabil: | the Securities Exchange ities of that section |
| | | |
| CUSIP NO. 039380308 | 13G | Page 2 of 8 Pages |
| (1) NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. | | cities only). |
| Renaissance Technologies LI | LC 26-0385758 | |
| (2) CHECK THE APPROPRIATE BOX IF | F A MEMBER OF A GROUP | (SEE INSTRUCTIONS): |

| | (d) | | |
|--|---|------------|----------------------------------|
| (3) | SEC USE ONLY | | |
| (4) | CITIZENSHIP OR PLACE OF ORGANIZATION Delaware | | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: | NUMBER OF SHARES | (5) | SOLE VOTING POWER 1,241,200 |
| | BY EACH REPORTING | (6) | SHARED VOTING POWER 0 |
| | | (7) | SOLE DISPOSITIVE POWER 1,241,200 |
| | | (8) | SHARED DISPOSITIVE POWER |
| (9) | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EAC 1,241,200 | CH REF | PORTING PERSON |
| (10) | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW ((SEE INSTRUCTIONS) | (9) ΕΣ | CLUDES CERTAIN SHARES |
| (11) | PERCENT OF CLASS REPRESENTED BY AMOUNT IN | I ROW | (9) |
| (12) | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS | 3) | |
| | Page 2 of 8 pag | | |
| | Page 3 of 8 pag | jes | |
| | IP NO. 039380308 13G | | Page 3 of 8 Page |
| (1) | NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSO | | |
| | RENAISSANCE TECHNOLOGIES HOLDINGS CORPORAT | CION | 13-3127734 |
| (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 | |
|--|--|
| Delaware | |
| | (5) SOLE VOTING POWER |
| NUMBER OF SHARES BENEFICIALLY OWNED | 1,241,200 |
| BY EACH REPORTING PERSON WITH: | (6) SHARED VOTING POWER |
| | 0 |
| | (7) SOLE DISPOSITIVE POWER |
| | 1,241,200 |
| | (8) SHARED DISPOSITIVE POWER |
| | 0 |
| | |
| (9) AGGREGATE AMOUNT BENEFICIALLY OWNED | BY EACH REPORTING PERSON |
| 1,241,200 | |
| (10) CHECK BOX IF THE AGGREGATE AMOUNT IN (SEE INSTRUCTIONS) | N ROW (9) EXCLUDES CERTAIN SHARES |
| (11) PERCENT OF CLASS REPRESENTED BY AMO | DUNT IN ROW (9) |
| 5.83 % | |
| (12) TYPE OF REPORTING PERSON (SEE INSTRU | JCTIONS) |
| Page 3 oi | f 8 pages |
| CUSIP NO. 039380308 | L3G Page 4 of 8 Page: |
| Item 1. | |
| (a) Name of Issuer | |
| Arch Coal, Inc. | |
| (b) Address of Issuer's Principal Exe | ecutive Offices. |
| One CityPlace Drive, Suite 300, | St. Louis, Missouri 63141 |
| Item 2. | |
| (a) Name of Person Filing: | |
| | d by Renaissance Technologies LLC ogies Holdings Corporation ("RTHC"). |

(b) Address of Principal Business Office or, if none, Residence.

The principal business address of the reporting persons is:

800 Third Avenue New York, New York 10022

(c) Citizenship.

RTC is a Delaware limited liability company, and RTHC is a Delaware corporation.

(d) Title of Class of Securities.

common stock

(e) CUSIP Number.

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- Item 3. If this statement is filed pursuant to Rule 13d-1(b) or 13-d-2(b) or (c), check whether the person filing is a:
- (a) [_] Broker or dealer registered under section 15 of the Act.
- (b) [_] Bank as defined in section 3(a)(6) of the Act.
- (c) [_] Insurance Company as defined in section 3(a)(19) of the Act.
- (d) [_] Investment Company registered under section 8 of the Investment Company Act.
- (e) [x] Investment Adviser in accordance with Sec.240.13d-1(b) (1) (ii) (E).
- (f) [_] Employee Benefit Plan or Endowment Fund in accordance with Sec. 240.13d-1 (b) (1) (ii) (F).
- (g) [_] Parent holding company, in accordance with Sec.240.13d-1(b)(1)(ii)(G).
- (h) $[_]$ A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act.
- (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.
- (j) [_] Group, in accordance with Sec.240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

(a) Amount beneficially owned.

RTC: 1,241,200 shares

RTHC: 1,241,200 shares, comprising the shares beneficially owned by RTHC, because of RTHC's majority ownership of RTC.

(b) Percent of Class.

RTC: 5.83 % RTHC: 5.83 %

- (c) Number of shares as to which the person has:
 - (i) sole power to vote or to direct the vote:

RTC: 1,241,200 RTHC: 1,241,200

(ii) Shared power to vote or to direct the vote: 0

(iii) sole power to dispose or to direct the disposition of:

RTC: 1,241,200 RTHC: 1,241,200

(iv) Shared power to dispose or to direct the disposition of:

RTC: 0 RTHC: 0

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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: [_]

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

Certain funds and accounts managed by RTC have the right to receive dividends and proceeds from the sale of the securities which are the subject of this report.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

Not applicable

Item 8. Identification and Classification of Members of the Group.

Not applicable

Item 9. Notice of Dissolution of a Group.

Not applicable

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Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and 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 11, 2016

Renaissance Technologies LLC

By: Mark Silber

Executive Vice President

Renaissance Technologies Holdings Corporation

By: Mark Silber Vice President

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See $18\ U.S.C.\ 1001$).

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EXHIBIT 99.1

AGREEMENT REGARDING JOINT FILING

UNDER RULE 13D-1(K) OF THE EXCHANGE ACT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned agrees to the filing on behalf of each of a Statement on Schedule 13G, and all amendments thereto, with respect to the shares of common stock of Arch Coal, Inc.

Date: February 11, 2016

Renaissance Technologies LLC

By: Mark Silber

Executive Vice President

Renaissance Technologies Holdings Corporation

By: Mark Silber Vice President

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