

CF Industries Holdings, Inc.

Form SC 13G/A

July 09, 2007

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

SCHEDULE 13G

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

CF INDUSTRIES HOLDINGS, INC.
(Name of Issuer)

Common Stock, par value \$0.01 per share
(Title of Class of Securities)

125269100

(CUSIP Number)

March 29, 2007

(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).

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125269100

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1 NAMES OF REPORTING PERSONS:
GREENLIGHT CAPITAL, L.L.C.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):
13-3886851

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 206,767

6 SHARES SHARED VOTING POWER:
BENEFICIALLY OWNED BY 0

7 EACH SOLE DISPOSITIVE POWER:
REPORTING PERSON 206,767

8 WITH: SHARED DISPOSITIVE POWER:
0

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

206,767

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

0.4%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

OO

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1 NAMES OF REPORTING PERSONS:
GREENLIGHT CAPITAL, INC.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):
13-3871632

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 244,596

6 SHARED VOTING POWER:

SHARES BENEFICIALLY OWNED BY 0

7 SOLE DISPOSITIVE POWER:

EACH REPORTING PERSON 244,596

8 SHARED DISPOSITIVE POWER:

WITH: 0

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

244,596

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

0.4%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

CO

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NAMES OF REPORTING PERSONS:

1

DME ADVISORS, L.P.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):

20-1365209

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS):

2

(a)

(b)

SEC USE ONLY:

3

CITIZENSHIP OR PLACE OF ORGANIZATION:

4

DELAWARE

SOLE VOTING POWER:

5

NUMBER OF 36,400

SHARED VOTING POWER:

SHARES BENEFICIALLY OWNED BY 6 0

SOLE DISPOSITIVE POWER:

EACH REPORTING PERSON 7 36,400

SHARED DISPOSITIVE POWER:

WITH: 8 0

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

9

36,400

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

0.1%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

PN

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NAMES OF REPORTING PERSONS:

1

DAVID EINHORN

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS):

2

(a)

(b)

SEC USE ONLY:

3

CITIZENSHIP OR PLACE OF ORGANIZATION:

4

UNITED STATES

SOLE VOTING POWER:

5

NUMBER OF 487,763

SHARED VOTING POWER:

SHARES BENEFICIALLY OWNED BY 6 0

SOLE DISPOSITIVE POWER:

EACH REPORTING PERSON 7 487,763

SHARED DISPOSITIVE POWER:

WITH: 8 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

9

487,763

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

0.9%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

IN

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Item 1(a) Name of Issuer:

CF Industries Holdings, Inc. (the Issuer)

Item 1(b) Address of the Issuer's Principal Executive Offices:

4 Parkway North, Suite 400
Deerfield, IL 60015

Item 2(a) Name of Person Filing:

This statement is filed on behalf of each of the following persons (collectively, the Reporting Persons):

- i) Greenlight Capital, L.L.C. (Greenlight LLC);
- ii) Greenlight Capital, Inc. (Greenlight Inc);
- iii) DME Advisors, L.P. (Advisors, and together with Greenlight LLC and Greenlight Inc, Greenlight);
and
- iv) Mr. David Einhorn (Mr. Einhorn).

This statement relates to Shares (as defined herein) held for the account of (i) Greenlight Capital, L.P. (Greenlight Fund), (ii) Greenlight Capital Qualified, L.P. (Greenlight Qualified), (iii) Greenlight Capital Offshore, Ltd. (Greenlight Offshore), and (iv) the managed account for which Advisors acts as investment manager.

Greenlight LLC is the general partner of Greenlight Fund and Greenlight Qualified. Greenlight Inc acts as the investment advisor for Greenlight Offshore. Advisors serves as investment manager to certain managed accounts. Mr. Einhorn is the principal of Greenlight.

Item 2(b) Address of Principal Business Office or, if None, Residence:

The principal business office of each of the Reporting Persons is 140 East 45th Street, 24th Floor, New York, New York 10017.

Item 2(c) Citizenship:

- i) Greenlight LLC is a Delaware limited liability company;
- ii) Greenlight Inc is a Delaware corporation;
- iii) Advisors is a Delaware limited partnership; and
- iv) Mr. Einhorn is a United States citizen.

Item 2(d) Title of Class of Securities:

Common Stock, par value \$0.01 per share (the Shares).

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Item 2(e) CUSIP Number:

1252691000

Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:

This Item 3 is not applicable.

Item 4. Ownership:

Item 4(a) Amount Beneficially Owned:

As of the July 6, 2007, each of the Reporting Persons may be deemed to be the beneficial owner of the following number of Shares:

- i) Greenlight LLC may be deemed the beneficial owner of 206,767 Shares held for the account of Greenlight Fund and Greenlight Qualified.
- ii) Greenlight Inc may be deemed the beneficial owner of 244,596 Shares held for the account of Greenlight Offshore.
- iii) Advisors may be deemed the beneficial owner of 36,400 Shares held for the account of the managed account for which Advisors acts as investment manager.
- iv) Mr. Einhorn may be deemed the beneficial owner of 487,763 Shares. This number consists of:
(A) 206,767 Shares held for the account of Greenlight Fund, and Greenlight Qualified, (B) 244,596 Shares held for the account of Greenlight Offshore, and (C) 36,400 Shares held for the account of the managed account for which Advisors acts as investment manager.

The filing of this Schedule 13G shall not be construed as an admission that any of the Reporting Persons is for the purposes of Section 13(d) or 13(g) of the Securities Exchange Act of 1934, the beneficial owner of any of the 487,763 Shares owned by Greenlight Fund, Greenlight Qualified, Greenlight Offshore or any managed account managed by Advisors. Pursuant to Rule 13d-4, each of the Reporting Persons disclaims all such beneficial ownership.

Item 4(b) Percent of Class:

The information set forth in Rows 5 through 11 of the cover page for each Reporting Person is hereby incorporated by reference into this Item 4(b) for each such Reporting Person.

Item 4(c) Number of shares as to which each such person has:

The information set forth in Rows 5 through 11 of the cover page for each Reporting Person is hereby incorporated by reference into this Item 4(c) for each such Reporting Person.

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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 [X].

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

This Item 6 is not applicable.

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

This Item 7 is not applicable.

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

This Item 8 is not applicable.

Item 9. Notice of Dissolution of Group:

This Item 9 is not applicable.

Item 10. Certification:

By signing below, each of the Reporting Persons certifies that, to the best of his or its 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.

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SIGNATURES

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

Date: July 9, 2007

GREENLIGHT CAPITAL, L.L.C.

By: /s/ Daniel Roitman
Name: Daniel Roitman
Title: Chief Operating Officer

GREENLIGHT CAPITAL, INC.

By: /s/ Daniel Roitman
Name: Daniel Roitman
Title: Chief Operating Officer

DME ADVISORS, L.P.

By: DME Advisors GP, L.L.C.,
its general partner

By: /s/ Daniel Roitman
Name: Daniel Roitman
Title: Chief Operating Officer

/s/ Daniel Roitman

Daniel Roitman, on behalf of David Einhorn

The Power of Attorney, executed by David Einhorn authorizing Harry Brandler and Daniel Roitman to sign and file this Schedule 13G on David Einhorn's behalf, which was filed with the Schedule 13G filed with the Securities and Exchange Commission on July 18, 2005, by the Reporting Persons with respect to the Ordinary Shares of Flamel Technologies S.A. is hereby incorporated by reference.