

BRUSH ENGINEERED MATERIALS INC

Form 11-K

June 29, 2007

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 11-K**

(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE
ACT OF 1934**

For the fiscal year ended December 31, 2006

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

**Commission file number 001-15885
BRUSH ENGINEERED MATERIALS INC.
SAVINGS AND INVESTMENT PLAN**

(Full Title of the Plan)

BRUSH ENGINEERED MATERIALS INC.

17876 St. Clair Avenue

Cleveland, Ohio 44110

**(Name of issuer of the securities held
pursuant to the plan and the address
of its principal executive office.)**

**Brush Engineered Materials Inc.
Savings and Investment Plan**

Required Information

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have audited the accompanying statements of net assets available for benefits of the Brush Engineered Materials Inc. Savings and Investment Plan as of December 31, 2006 and 2005, and the related statements of changes in net assets available for benefits for the year ended December 31, 2006. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 2006 and 2005, and the changes in its net assets available for benefits for the year ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2006, is presented for purposes of additional analysis and is not a required part of the financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in our audits of the financial statements and, in our opinion, are fairly stated in all material respects in relation to the financial statements taken as a whole.

/s Ernst & Young LLP
Cleveland, Ohio
June 29, 2007

**Brush Engineered Materials Inc.
Savings and Investment Plan
Statements of Net Assets Available for Benefits**

	December 31	
	2006	2005
Assets		
Investments	\$ 159,907,101	\$ 132,880,323
Contribution receivables:		
Employer	91,099	87,852
Participants	276,110	277,773
Total contribution receivables	367,209	365,625
Pending sales	104,390	127,852
Net assets available for benefits	\$ 160,378,700	\$ 133,373,800

See accompanying notes to financial statements.

**Brush Engineered Materials Inc.
Savings and Investment Plan
Statement of Changes in Net Assets Available for Benefits
Year Ended December 31, 2006**

Additions

Net investment income:	
Net appreciation in fair value of investments	\$ 21,683,388
Interest and dividends	5,514,701
	27,198,089
Contributions:	
Participants	7,119,024
Employer	2,414,190
Employee PreTax Catch-up	273,687
Rollover	489,492
	10,296,393
Transfer-in of Assets from Thin Film Technology, Inc. Plan	296,870
Total additions	37,791,352

Deductions

Benefits paid directly to participants	10,759,026
Administration fee	18,421
Defaulted loans	9,005
Total Deductions	10,786,452
Net increase	27,004,900
Net assets available for benefits:	
Beginning of year	133,373,800
End of year	\$ 160,378,700

See accompanying notes to financial statements.

**Brush Engineered Materials Inc.
Savings and Investment Plan
Notes to Financial Statements
December 31, 2006 and 2005
and Year Ended December 31, 2006**

NOTE A Description of the Plan

The following description of the Brush Engineered Materials Inc. Savings and Investment Plan (the Plan) provides only general information. Participants should refer to the Summary Plan Description for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan that covers certain eligible employees of Brush Engineered Materials Inc. (Company) and participating employers who have adopted the Plan (Company reference includes participating employers where appropriate). The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

During 2005, Brush Engineered Materials Inc. purchased Thin Film Technology, Inc. Effective April 3, 2006, the assets from the Thin Film Technology, Inc. 401(k) Profit Sharing Plan were merged with those of the Brush Engineered Materials Inc. Savings and Investment Plan.

Contributions

The Plan provides for basic contributions by employees of up to 6% of their earnings through either pre-tax (salary reduction) or after-tax contributions. Currently, basic contributions are matched by the Company at the rate of 50% of such contributions. The rate at which such basic contributions are matched by the Company may be decreased or increased (up to a 100% rate) by action of the Company's Board of Directors.

An employee who makes basic contributions of 6% of earnings may also make supplemental contributions of up to 44% of earnings which are not matched by Company contributions and which may be made in any combination of pre-tax and/or after-tax contributions.

An employee's contributions made to the Plan on a pre-tax basis may not exceed certain IRS maximum amounts. The maximum amount \$15,000 in 2006. If an employee will be 50 or older by the end of the plan year, and is making the maximum elective contribution for the year, he/she may make additional pre-tax catch-up contributions of up to 75% of earnings. In 2006, the maximum amount for a catch-up contribution is \$5,000.

Currently, participants can direct, in increments of 1%, their basic, supplemental, rollover, catch-up, Company matching, and transfer contributions (as described in the Plan) to be invested in any of the fund options offered by the Plan. Participants can also transfer amounts between fund options on each investment change date.

The Company made PAYSOP contributions to the Plan for plan years 1984 through 1986.

Beginning March 1, 2006, employees can also contribute on a Roth 401(k) basis under the Plan.

Brush Engineered Materials Inc.
Savings and Investment Plan
Notes to Financial Statements Continued

Vesting

All employee and Company contributions are fully vested at all times.

Participant Loans

A participant may borrow funds from his account, provided such loan is secured by 50% of the value of the participant's account immediately prior to the loan and evidenced by a promissory note executed by the participant.

Payment of Benefits

At retirement, death or other termination, a participant (or his death beneficiary) is eligible to receive a distribution of all employee and Company contributions credited to the employee's account plus or minus any net gain or loss thereon.

The value of distributions and withdrawals is based on the value of a participant's account on the valuation date immediately preceding the date of distribution or withdrawal and is deducted from the participant's account as of such valuation date.

Distribution to a participant or a person designated by the participant as his death beneficiary is made under one or more (as applicable) of the following methods as elected by the participant (or in certain cases the death beneficiary):

- (i) Lump sum payment in cash;
- (ii) Lump sum payment in cash, except that a participant's interest in the Company Stock Fund and the PAYSOP contributions account will be paid in full shares of Common Stock of the Company, with any fractional shares being paid in cash; and
- (iii) Periodic distributions, not more frequently than monthly, of at least \$200.

Insurance Policies

Prior to June 1, 1989, participants who were employees of Williams Advanced Materials Inc. could have directed a portion of their contributions to be used to purchase insurance policies that were excluded from the former Williams Advanced Materials Inc. Savings and Investment Plan assets. Life insurance policies on the lives of participants, purchased under the former Williams Advanced Materials Inc. Savings and Investment Plan prior to July 1, 1989, may continue to be held.

Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA.

Brush Engineered Materials Inc.
Savings and Investment Plan
Notes to Financial Statements Continued

Note B Summary of Accounting Policies

Basis of Accounting

The financial statements of the Plan have been prepared on the accrual basis of accounting.

Investment Valuation

Investments are stated at fair value. Investment in the company stock fund is valued based on the latest reported closing price of the stock component and the actual cash held in the fund. The shares of registered investment companies are valued at quoted market prices that represent the net asset values of shares held by the Plan at the latest closing price. Investment in participation units of the money market funds are stated at fair value as determined by Fidelity Management Trust Company, the Trustee. Participant loans are valued at their outstanding balances, which approximate fair value.

Purchases and sales of securities are recorded on a trade-date basis. Interest and dividend income is recorded on the accrual basis.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Brush Engineered Materials Inc.
Savings and Investment Plan
Notes to Financial Statements Continued

NOTE C Investments

During 2006, the Plan's investments (including investments purchased, sold as well as held during the year) appreciated in fair value as determined by quoted market prices as follows:

	Net Realized and Unrealized Appreciation in Fair Value of Investments
Brush Engineered Materials Inc. Common Stock	\$ 12,438,978.00
Shares of registered investment companies	9,244,410
	\$ 21,683,388

Investments that represent 5% or more of fair value of the Plan's net assets are as follows:

	December 31	
	2006	2005
Vanguard Asset Allocation Fund	\$12,658,975	\$11,565,947
PIMCO Total Return Fund	10,470,544	10,703,419
Brush Engineered Materials Inc. Common Stock	19,331,059	11,935,549
TORRAY Fund*	0	9,675,093
DFA U.S. Large Cap Value Fund	10,752,264	0
Fidelity Blue Chip Growth Fund	21,225,326	21,869,742
Fidelity Diversified International Fund	21,091,687	16,178,179
Fidelity Money Market Trust: Retirement Money Market Portfolio	14,031,665	9,838,066
Spartan U.S. Equity Index Fund	18,414,126	17,404,236

* This fund was eliminated in 2006 and all assets were transferred to the DFA U.S. Large Cap Value Fund.

Brush Engineered Materials Inc.
Savings and Investment Plan
Notes to Financial Statements Continued

NOTE D Income Tax Status

The Plan has received a determination letter from the Internal Revenue Service dated July 25, 2002, stating that the Plan is qualified under Section 401(a) of the Internal Revenue Code (Code) and, therefore, the related trust is exempt from taxation. Subsequent to the issuance of the determination letter, the Plan was amended. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The Plan Administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believes that the Plan, as amended, is qualified and the related trust is tax exempt.

NOTE E Transactions with Parties-in-Interest

All legal and accounting expenses of the Plan are paid by the Company. All administrative fees are paid by the Plan other than as described above or pursuant to the trust agreement, the Plan did not have any agreements or transactions with parties-in-interest. During 2006, the Plan had the following transactions related to shares of Brush Engineered Materials Inc. Common Stock:

Purchases	\$17,164,100
Sales	21,722,598

NOTE F Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

NOTE G Subsequent Event

Effective March 26, 2007, Circuit Processing Technology, Inc. was divested and is no longer a part of the Plan.

Brush Engineered Materials Inc.
Savings and Investment Plan
EIN: 34-1919973 Plan Number 003
Schedule H, Line 4i
Schedule of Assets (Held at End of Year)

December 31, 2006

Identity of Issue	Description of Investment	Current Value
Brush Engineered Materials Inc. Common Stock *	567,273 shares	\$ 19,331,059
Shares of registered investment companies:		
Vanguard Asset Allocation Fund	439,853.207 shares	12,658,975
Vanguard Midcap IDX Adm Fund	63,631.522 shares	5,709,656
3rd Avenue Real Estate Val	122,037.084 shares	4,227,365
Harbor Small Cap Value IS	89,669.874 shares	1,922,522
PIMCO Total Return Fund	1,008,722.967 shares	10,470,544
MSI Small Company Growth Fund	136,211.876 shares	1,720,356
DFA US Large Cap Val Fund	425,832.247 shares	10,752,264
Fidelity Blue Chip Growth Fund*	479,018.874 shares	21,225,326
Fidelity Diversified International Fund*	570,816.969 shares	21,091,687
Fidelity Freedom Income Fund*	41,259.985 shares	476,140
Fidelity Freedom 2000 Fund*	61,425.345 shares	765,360
Fidelity Freedom 2005 Fund*	6,980.532 shares	81,044
Fidelity Freedom 2010 Fund*	212,772.196 shares	3,110,730
Fidelity Freedom 2015 Fund*	139,949.448 shares	1,707,383
Fidelity Freedom 2020 Fund*	273,245.529 shares	4,243,503
Fidelity Freedom 2025 Fund*	48,168.686 shares	615,114
Fidelity Freedom 2030 Fund*	88,846.750 shares	1,424,213
Fidelity Freedom 2035 Fund*	13,125.525 shares	173,126
Fidelity Freedom 2040 Fund*	113,569.526 shares	1,076,639
Spartan U.S. Equity Index Fund*	366,961.463 shares	18,414,126
		141,197,134
Money market funds:		
Fidelity Employee Benefits Money Market Fund*	567,278 shares	1,086,439
Fidelity Money Market Trust: Retirement Money Market Portfolio*	14,031,665.060 shares	14,031,665
		15,118,104
Participant Promissory Notes *	5.41 - 6.50 with maturity dates through 2020	3,591,864

\$ 159,907,101

* Party-in-interest
to the Plan.

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned thereunto duly authorized.

BRUSH ENGINEERED MATERIALS INC.
SAVINGS AND INVESTMENT PLAN

By /s/ Michael C. Hasychak
Vice President, Treasurer and Secretary
Brush Engineered Materials Inc.

Date: June 29, 2007