Core-Mark Holding Company, Inc.

Form 4

August 19, 2008

FORM 4

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

OMB 3235-0287 Number:

OMB APPROVAL

Check this box if no longer subject to Section 16.

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF **SECURITIES**

January 31, Expires: 2005 Estimated average

0.5

Form 4 or Form 5 obligations may continue.

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

burden hours per response...

See Instruction 1(b).

(Last)

(Print or Type Responses)

1. Name and Address of Reporting Person * 5. Relationship of Reporting Person(s) to 2. Issuer Name and Ticker or Trading Prokop Basil P Issuer Symbol Core-Mark Holding Company, Inc. (Check all applicable) [CORE]

Director 10% Owner

395 OYSTER POINT BLVD., **SUITE 415**

(First)

(Street)

3. Date of Earliest Transaction (Month/Day/Year)

08/18/2008

Other (specify Officer (give title below) President of Canada Distributi

(Middle)

4. If Amendment, Date Original

6. Individual or Joint/Group Filing(Check

Filed(Month/Day/Year)

Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting

SOUTH SAN FRANCISCO, CA 94080

(City)	(State) (Zip) Table	e I - Non-D	erivative	Secur	ities Acqui	red, Disposed of	, or Beneficial	ly Owned
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. 4. Securities Acquired Transaction(A) or Disposed of (D) Code (Instr. 3, 4 and 5) (Instr. 8)			d of (D)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
			Code V	Amount	or (D)	Price	(Instr. 3 and 4)	(Instr. 4)	
Coremark Common Stock	08/18/2008		M	1,400	A	\$ 0	1,400	D	
Coremark Common Stock	08/18/2008		S	200	D	\$ 29.85	1,200	D	
Coremark Common Stock	08/18/2008		S	300	D	\$ 29.86	900	D	
	08/18/2008		S	200	D	\$ 29.89	700	D	

Coremark Common Stock							
Coremark Common Stock	08/18/2008	S	300	D	\$ 29.894	400	D
Coremark Common Stock	08/18/2008	S	100	D	\$ 29.93	300	D
Coremark Common Stock	08/18/2008	S	100	D	\$ 29.94	200	D
Coremark Common Stock	08/18/2008	S	100	D	\$ 30.19	100	D
Coremark Common Stock	08/18/2008	S	100	D	\$ 30.25	0	D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474 (9-02)

$\label{thm:convertible} \begin{tabular}{ll} Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned \\ (\emph{e.g.}, puts, calls, warrants, options, convertible securities) \\ \end{tabular}$

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. 5. Number Transaction Derivative Code Securities (Instr. 8) Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		
				Code V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Restricted Stock Units 07LTIP	\$ 0	08/18/2008		M		1,400	07/02/2008	07/01/2017	Coremark Common Stock	1,400

Reporting Owners

Reporting Owner Name / Address Relationships

Director 10% Owner Officer Other

Prokop Basil P 395 OYSTER POINT BLVD., SUITE 415 SOUTH SAN FRANCISCO, CA 94080

President of Canada Distributi

Signatures

S.Loretz-Congdon,

POA 08/19/2008

**Signature of Reporting Date
Person

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

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