

Core-Mark Holding Company, Inc.

Form 4

August 15, 2008

**FORM 4****UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

Check this box  
if no longer  
subject to  
Section 16.  
Form 4 or  
Form 5  
obligations  
may continue.  
See Instruction  
1(b).

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

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

## OMB APPROVAL

OMB  
Number: 3235-0287  
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2005  
Estimated average  
burden hours per  
response... 0.5

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
Prokop Basil P

(Last) (First) (Middle)

395 OYSTER POINT BLVD.,  
SUITE 415

(Street)

SOUTH SAN  
FRANCISCO, CA 94080

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading  
Symbol  
Core-Mark Holding Company, Inc.  
[CORE]

3. Date of Earliest Transaction  
(Month/Day/Year)  
08/14/2008

4. If Amendment, Date Original  
Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to  
Issuer

(Check all applicable)

\_\_\_\_ Director \_\_\_\_ 10% Owner  
\_\_\_\_ Officer (give title \_\_\_\_ Other (specify  
below) below)  
President of Canada Distributi

6. Individual or Joint/Group Filing(Check  
Applicable Line)  
\_X\_ Form filed by One Reporting Person  
\_\_\_\_ Form filed by More than One Reporting  
Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of<br>Security<br>(Instr. 3) | 2. Transaction Date<br>(Month/Day/Year) | 2A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year) | 3.<br>Transaction<br>Code<br>(Instr. 8) | 4. Securities Acquired (A)<br>or Disposed of (D)<br>(Instr. 3, 4 and 5) | 5. Amount of<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 3 and 4) | 6. Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I)<br>(Instr. 4) | 7. Nature of<br>Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|---------------------------------------|-----------------------------------------|-------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------|
|                                       |                                         |                                                             | Code                                    | V                                                                       | Amount                                                                                                             | (A)<br>or<br>(D)                                                        | Price                                                             |
| Coremark<br>Common<br>Stock           | 08/14/2008                              |                                                             | M                                       |                                                                         | 19,243                                                                                                             | A                                                                       | \$ 15.5                                                           |
| Coremark<br>Common<br>Stock           | 08/14/2008                              |                                                             | S                                       |                                                                         | 19,243                                                                                                             | D                                                                       | \$ 29.1494                                                        |

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  
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SEC 1474  
(9-02)

**displays a currently valid OMB control number.**

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year) | 4.<br>Transaction<br>Code<br>(Instr. 8) | 5. Number of<br>Derivative<br>Securities<br>Acquired (A)<br>or Disposed of<br>(D)<br>(Instr. 3, 4,<br>and 5) | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |                    | 7. Title and Amount of<br>Underlying Securities<br>(Instr. 3 and 4) |                                     |
|-----------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|--------------------|---------------------------------------------------------------------|-------------------------------------|
|                                                     |                                                                       |                                         |                                                             | Code                                    | V (A) (D)                                                                                                    | Date<br>Exercisable                                            | Expiration<br>Date | Title                                                               | Amount<br>or<br>Number<br>of Shares |
| 04LTIP<br>plan grtd<br>8-23-2004<br>NQ              | \$ 15.5                                                               | 08/14/2008                              |                                                             | M                                       | 19,243                                                                                                       | 08/23/2005                                                     | 08/23/2011         | Coremark<br>Common<br>Stock                                         | 19,243                              |

## 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

08/15/2008

Signature of Reporting  
Person

Date

## 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.

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