

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Petrarca Mark A</u>			2. Issuer Name and Ticker or Trading Symbol <u>SMITH A O CORP [AOS]</u>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director _____ 10% Owner _____ <input checked="" type="checkbox"/> Officer (give title below) _____ Other (specify below) _____ <p style="text-align: center;">Senior Vice Pres. - H.R. & P.A</p>		
(Last) _____ (First) _____ (Middle) _____ <u>A. O. SMITH CORPORATION</u> <u>11270 WEST PARK PLACE</u>			3. Date of Earliest Transaction (Month/Day/Year) <u>02/09/2012</u>					
(Street) <u>MILWAUKEE</u> <u>WI</u> <u>53224</u>			4. If Amendment, Date of Original Filed (Month/Day/Year)			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person		
(City) _____ (State) _____ (Zip) _____								

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

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/09/2012		M		6,300 ⁽¹⁾	A	\$45.588	26,825	D	
Common Stock	02/10/2012		S		2,703 ⁽²⁾	D	\$45.588	24,122	D	

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

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. Transaction Code (Instr. 8)		5. Number of Derivative Securities 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 Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Restricted Stock Units	(1)	02/09/2012		M			6,300	(1)	(1)	Common Stock	6,300	\$0	6,900	D	

Explanation of Responses:

1. 6,300 Restricted Stock Units were granted on 02/09/2009, under the A. O. Smith Combined Incentive Compensation Plan, a transaction exempt under Rule 16b-3. 6,300 Restricted Stock Units vested on 02/09/2012. As of result of vesting, the Company is obligated to deliver 6,300 shares of Common Stock to the reporting person.

2. The reporting person sold these shares to obtain funds to pay the withholding taxes due as a result of the vesting of the restricted stock units described in footnote (1).

Remarks:

James F. Stern, Attorney-in-Fact for Mark A. Petrarca 02/10/2012

** Signature of Reporting Person

Date

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

* 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.

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 Number.

POWER OF ATTORNEY

Know all by these presents, that, for good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the undersigned revokes the Power of Attorney (the "Power") executed by the undersigned on or about 1/10/12, and hereby grants, ratifies and confirms to the undersigned (1) execute for and on behalf of the undersigned (in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder (the "Act") (2) do and perform any and all acts for and on behalf of the undersigned that may be necessary or desirable to complete and execute any such Documents and timely file any such Documents with the appropriate regulatory authorities (3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interests of the undersigned. The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or proper to carry out the powers hereinbefore conferred, and to execute and deliver all instruments, contracts, documents and papers that may be necessary or proper in connection herewith. This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Documents with respect to the undersigned's holdings in the securities specified in the Schedule attached hereto. IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 9th day of February, 2012.

/s/Mark A. Petrarca