PALEY ROBERT A

Form 4

October 31, 2007

FORM 4

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

SECURITIES

OMB Number:

3235-0287

Expires:

January 31, 2005

0.5

Estimated average burden hours per

OMB APPROVAL

response...

Check this box if no longer subject to Section 16. 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 See Instruction

1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person * PALEY ROBERT A			Symbol	and Ticker or Trading	5. Relationship of Reporting Person(s) to Issuer			
(Last)	(First)	(Middle)	3. Date of Earliest	CO /NEW/ [MON] Transaction	(Check all applicable)			
800 N LINDBERGH BLVD			(Month/Day/Year) 10/29/2007)	Director 10% Owner _X_ Officer (give title Other (specify below) Vice President and Treasurer			
	(Street)		4. If Amendment,	Date Original	6. Individual or Joint/Group Filing(Check			
ST LOUIS,	, MO 63167		Filed(Month/Day/Y	ear)	Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting Person			
(City)	(State)	(Zip)	Table I - Nor	n-Derivative Securities Acq	uired, Disposed of, or Beneficially Owned			
1.Title of	2. Transaction Dat	e 2A. Deeme	ed 3.	4. Securities Acquired (A)) 5. Amount of 6. 7. Natu			

(City)	(State)	(Zip) Tab	le I - Non-	Derivative	Secui	rities Acquir	ed, Disposed of,	or Beneficiall	y 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 (A) Transactionor Disposed of (D) Code (Instr. 3, 4 and 5) (Instr. 8)				5. Amount of Securities Beneficially Owned Following Reported	6. Ownership Form: Direct (D) or Indirect (I)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code V	Amount	or (D)	Price	Transaction(s) (Instr. 3 and 4)	(Instr. 4)	
Common Stock	10/29/2007		M	16,014	A	\$ 20.805	21,185	D	
Common Stock	10/29/2007		M	6,848	A	\$ 29.2175	28,033	D	
Common Stock	10/29/2007		S	100	D	\$ 94.88	27,933	D	
Common Stock	10/29/2007		S	1,100	D	\$ 94.9	26,833	D	
Common Stock	10/29/2007		S	1,400	D	\$ 94.91	25,433	D	

Edgar Filing: PALEY ROBERT A - Form 4

Common Stock	10/29/2007	S	1,200	D	\$ 94.92	24,233	D	
Common Stock	10/29/2007	S	1,300	D	\$ 94.93	22,933	D	
Common Stock	10/29/2007	S	200	D	\$ 94.94	22,733	D	
Common Stock	10/29/2007	S	2,600	D	\$ 94.95	20,133	D	
Common Stock	10/29/2007	S	300	D	\$ 94.96	19,833	D	
Common Stock	10/29/2007	S	1,300	D	\$ 94.97	18,533	D	
Common Stock	10/29/2007	S	1,600	D	\$ 94.98	16,933	D	
Common Stock	10/29/2007	S	900	D	\$ 94.99	16,033	D	
Common Stock	10/29/2007	S	2,200	D	\$ 95	13,833	D	
Common Stock	10/29/2007	S	2,300	D	\$ 95.01	11,533	D	
Common Stock	10/29/2007	S	300	D	\$ 95.02	11,233	D	
Common Stock	10/29/2007	S	1,100	D	\$ 95.03	10,133	D	
Common Stock	10/29/2007	S	100	D	\$ 95.04	10,033	D	
Common Stock	10/29/2007	S	2,100	D	\$ 95.05	7,933	D	
Common Stock	10/29/2007	S	1,662	D	\$ 95.06	6,271	D	
Common Stock	10/29/2007	S	1,100	D	\$ 95.08	5,171	D	
Common Stock						6,800	I	By 401(k) Plan
Common Stock						232	I	By 401(k) Plan of Spouse

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

SEC 1474 (9-02)

Edgar Filing: PALEY ROBERT A - Form 4

number.

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 orDerivative Securities Acquired (A) or Disposed (D) (Instr. 3, 4, and 5)	Expiration Date (Month/Day/Yea	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount o Underlying Securities (Instr. 3 and 4)	
				Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Share	
Option (right to buy)	\$ 20.805	10/29/2007		M	16,01	4 11/15/2005 <u>(1)</u>	10/29/2014	Common Stock	16,014	
Option (right to buy)	\$ 29.2175	10/29/2007		M	6,848	11/15/2006 <u>(2)</u>	10/28/2015	Common Stock	6,848	

Reporting Owners

Reporting Owner Name / Address Relationships

Director 10% Owner Officer Other

PALEY ROBERT A 800 N LINDBERGH BLVD ST LOUIS, MO 63167

Vice President and Treasurer

Signatures

/s/ Christopher A. Martin, Attorney-in-Fact

10/31/2007

**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).
- One-third of the options became exercisable on November 15, 2005, one-third of the options became exercisable on November 15, 2006 and one-third of the options become exercisable on November 15, 2007, subject to the terms of the Monsanto Company Long Term Incentive Plan.
- One-third of the options became exercisable on November 15, 2006, one-third of the options become exercisable on November 15, 2007 and one-third of the options become exercisable on November 15, 2008, subject to the terms of the Monsanto Company Long Term Incentive Plan.

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.

Reporting Owners 3