

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

OMB APPROVAL	
OMB Number:	3235-0287
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1. Name and Address of Reporting Person* <u>SMITH JOHN ALEXANDER</u> (Last) (First) (Middle) <u>2 TECH DRIVE</u> (Street) <u>ANDOVER MA 01810</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MKS INSTRUMENTS INC [MKSI]</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) <u>V.P. & Chief Tech Officer</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>03/16/2010</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

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	03/16/2010		M		1,633	A	\$0	1,633	D	
Common Stock	03/16/2010		M		1,166	A	\$0	2,799	D	
Common Stock	03/16/2010		F ⁽¹⁾		890	D	\$19.29	1,909	D	
Common Stock	03/17/2010		S		1,909	D	\$19.17 ⁽²⁾	0	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
Restricted Stock Unit	(3)	03/16/2010		M			1,633	(4)	(4)	Common Stock	1,633	\$0	11,424	D	
Restricted Stock Unit	(3)	03/16/2010		M			1,166	(5)	(5)	Common Stock	1,166	\$0	9,001	D	

Explanation of Responses:

- This transaction was effected pursuant to a Rule 10b5-1 trading plan previously adopted by the reporting person.
- This transaction was executed in multiple trades at prices ranging from \$19.17 to 19.173. The price reported above reflects the weighted average sale price. The reporting person hereby undertakes to provide, upon request, the full information regarding the number of shares and prices at which the transaction was effected.
- Each restricted stock unit represents the contingent right to receive one share of common stock of MKS Instruments, Inc.
- These RSUs are subject to the achievement of performance criteria determined in the first year of the grant and thereafter vests in equal annual installments over three years.
- The RSUs vest in equal annual installments over three years.

/s/Renee M. Donlan POA 03/18/2010

** 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.