

OMB APPROVAL

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## INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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>Quirk Brian Charles</u>	2. Date of Event Requiring Statement (Month/Day/Year) 03/01/2014	3. Issuer Name and Ticker or Trading Symbol <u>MKS INSTRUMENTS INC [ MKSI ]</u>	
		4. 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>Sr. VP, Global Operations</u>	5. If Amendment, Date of Original Filed (Month/Day/Year)
(Last) (First) (Middle) <u>2 TECH DRIVE, SUITE 201</u>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person
(Street) <u>ANDOVER MA 01810</u>			
(City) (State) (Zip)			

## Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
<u>Common Stock</u>	<u>3,152.635</u>	<u>D</u>	

## Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
<u>Restricted Stock Unit</u>	<u>(1)</u>	<u>(1)</u>	<u>Common Stock</u>	<u>17,040.25</u>	<u>(2)</u>	<u>D</u>	
<u>Restricted Stock Unit</u>	<u>(3)</u>	<u>(3)</u>	<u>Common Stock</u>	<u>14,428.831</u>	<u>(2)</u>	<u>D</u>	

## Explanation of Responses:

1. The RSUs vest in equal annual installments over three years from the respective original grant date. The amount above comprises of: 2,113.136 which was granted on April 11, 2011; 4,938.407 which was granted on April 2, 2012; 3,962.536 which was granted on February 25, 2013; and 6,026.171 on February 10, 2014.

2. Each restricted stock unit represents the contingent right to receive one share of common stock of MKS Instruments, Inc.

3. 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 of over three years from the respective original grant date. The amount above comprises of 5,389.575 which was granted on February 25, 2013 and 9,039.256 on February 10, 2014.

/s/Renee M. Donlan POA 03/06/2014

\*\* 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 5 (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.