Form 144 Filer Information UNITED STATES
SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 144

FORM 144

NOTICE OF PROPOSED SALE OF SECURITIES

PURSUANT TO RULE 144 UNDER THE SECURITIES ACT OF 1933

144: Filer Information

Filer CIK 0001501968
Filer CCC XXXXXXXX
Is this a LIVE or TEST Filing? • LIVE • TEST

Submission Contact Information

Name Phone

E-Mail Address

144: Issuer Information

Name of Issuer MKS INSTRUMENTS INC

SEC File Number 000-23621

2 TECH DRIVE SUITE 201 ANDOVER

Address of Issuer

ANDOVER

MASSACHUSETTS

WASSACHUSEI IS

01810

Phone 978-645-5500

Name of Person for Whose Account the Securities are To Be Sold Moloney Jacqueline F

See the definition of "person" in paragraph (a) of Rule 144. Information is to be given not only as to the person for whose account the securities are to be sold but also as to all other persons included in that definition. In addition, information shall be given as to sales by all persons whose sales are required by paragraph (e) of Rule 144 to be aggregated with sales for the account of the person filing this notice.

Relationship to Issuer Director

144: Securities Information

Title of the Class of Securities To Be Sold	Name and Address of the Broker	Number of Shares or Other Units To Be Sold	Aggregate Market Value	Number of Shares or Other Units Outstanding	Approximate Date of Sale	Name the Securities Exchange
Common	Fidelity Brokerage Services LLC 900 Salem Street Smithfield RI 02917	250	20557.50	66878495	12/01/2023	NASDAQ

Furnish the following information with respect to the acquisition of the securities to be sold and with respect to the payment of all or any part of the purchase price or other consideration therefor:

144: Securities To Be Sold

Title of the	Date you	Nature of	Name of	Is	Date	Amount of	Date of	Nature of
Class	Acquired	Acquisition	Person from	this	Donor	Securities	Payment	Payment *

	Transaction	w nom Acquired	a Acquired Gift?	Acquired	
Common	05/09/2022 Restricted Stock Vesting	Issuer		250	05/09/2022 Compensation

^{*} If the securities were purchased and full payment therefor was not made in cash at the time of purchase, explain in the table or in a note thereto the nature of the consideration given. If the consideration consisted of any note or other obligation, or if payment was made in installments describe the arrangement and state when the note or other obligation was discharged in full or the last installment paid.

Furnish the following information as to all securities of the issuer sold during the past 3 months by the person for whose account the securities are to be sold.

144: Securities Sold During The Past 3 Months

Nothing to Report

144: Remarks and Signature

Remarks

Date of Notice 12/01/2023 Date of Plan Adoption or Giving of Instruction, If Relying on Rule 10b5-1

08/30/2023

ATTENTION:

The person for whose account the securities to which this notice relates are to be sold hereby represents by signing this notice that he does not know any material adverse information in regard to the current and prospective operations of the Issuer of the securities to be sold which has not been publicly disclosed. If such person has adopted a written trading plan or given trading instructions to satisfy Rule 10b5-1 under the Exchange Act, by signing the form and indicating the date that the plan was adopted or the instruction given, that person makes such representation as of the plan adoption or instruction date.

Signature

/s/ Daniel Tucci, as a duly authorized representative of Fidelity Brokerage Services LLC, as attorney-in-fact for Jacqueline F. Moloney

ATTENTION: Intentional misstatements or omission of facts constitute Federal Criminal Violations (See 18 U.S.C. 1001)