FORM 4

Check this box if no longer subject

to Section 16. Form 4 or Form 5 obligations may continue. See

Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Washington, | D.C. 20549 |
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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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* Moloney Jacqueline F | | | | | | 2. Issuer Name and Ticker or Trading Symbol MKS INSTRUMENTS INC [MKSI] | | | | | | | | | ationship k all app Direc | , | ng Per | son(s) to Is | |
|--|---|------------------|--------------------------------------|----------|--|---|--|---|--------|---|----------|------------|---|--|---------------------------------|--|--|---|------------|
| (Last) | (Fir S INSTRU | st) (MENTS, INC. | Middle) | | | 3. Date of Earliest Transaction (Month/Day/Year) 03/15/2023 | | | | | | | | | Office below | er (give title v) | | Other (below) | specify |
| 2 TECH DRIVE, SUITE 201 | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable Line) | | | | | | |
| (Street) | ER MA | A 0 | 1810 | | | | | | | | | | | X | | filed by On filed by Mo on | | • | |
| (City) | (Sta | ate) (Ž | Zip) | | | | | | | | | | | | | | | | |
| | | Table | I - No | n-Deriva | tive S | Secu | rities | Acq | uired, | Dis | posed of | , or E | Benefi | icially | / Own | ed | | | |
| 1. Title of Security (Instr. 3) 2. Transacti Date (Month/Day | | | | | Execution Date, | | | 3. Transaction Code (Instr. 8) 4. Securitie Disposed C 5) | | | | | 4 and Securit | | ties cially Following | Form (D) o | vnership n: Direct r Indirect nstr. 4) | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | | | v | Amount | (A) (D) | (A) or (D) Pri | | Transa | ction(s) 3 and 4) | | | (Instr. 4) |
| Common Stock 03/15/2 | | | | | 1023 | | | S ⁽¹⁾ | | 225 | D | \$8 | 36.67 | 9,684.327 | | | 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) | ive Conversion Date Execution Date, or Exercise (Month/Day/Year) if any | | 4. Transaction Code (Instr. 8) | | 5. Nu of Deriv Secu Acqu (A) or Dispo of (D) (Instrand 5 | rities lired r osed) r. 3, 4 | 6. Date Exerc Expiration Da (Month/Day/Y | | ite | e Amount of Securities Underlying Derivative Security (In 3 and 4) Expiration Amount of Num of Num | | De Se (In: | Price of rivative curity str. 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) | | |

Explanation of Responses:

1. This transaction was effected pursuant to a Rule 10b5-1 trading plan previously adopted by the reporting person.

/s/ M. Kathryn Rickards, 03/16/2023 attorney-in-fact

** 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.