FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| gton, D.C. 20549 | 1       |
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| Jion, D.C. 20049 | ∥ OMB ∆ |

| OMB APPROVAL             |     |  |  |  |  |  |  |  |  |
|--------------------------|-----|--|--|--|--|--|--|--|--|
| OMB Number: 3235         |     |  |  |  |  |  |  |  |  |
| Estimated average burden |     |  |  |  |  |  |  |  |  |
| hours per response.      | 0.5 |  |  |  |  |  |  |  |  |

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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* Schreiner James Alan  |   |  |  |   | 2. Issuer Name and Ticker or Trading Symbol  MKS INSTRUMENTS INC [ MKSI ] |  |     |   |  |                  |   |                  | ationship of<br>k all applicat<br>Director<br>Officer (g  | ble)  | Person  | n(s) to Issue<br>10% Ow<br>Other (s) | ner  |                                       |
|--|---|--|--|---|---|--|-----|---|--|------------------|---|------------------|---|---|---|--------------------------------------|--|---------------------------------------|
|  | ,   | First) MENTS, INC. JITE 201                | (Middle)   | 3. Date of Earliest Transaction (Month/Day/Year) 02/08/2023 |   |  |     |   |  | 1 ^              | EVP & COO, MSD  |                  |   |   |   |                                      |  |                                       |
| (Street) ANDOV (City)  |   | 1A<br>State)                               | 01810<br>(Zip)   |   | 4. If Amendment, Date of Original Filed (Month/Day/Year)                  |  |     |   |  |                  |   | 6. Indi<br>Line) | ividual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person |   |   |                                      |  |                                       |
|  |   |  |  | 2. Transac  | rative Securities Acquired, Disposed of, or Beneficiation  2A. Deemed     |  |     |   |  | or               | or 5. Amount of   |                  | 6. Ownership<br>Form: Direct  |   | 7. Nature of Indirect   |                                      |  |                                       |
|  |   |  | (Month/Da  |   |   | Code (I  |     | (A) or  |  | Price            | Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) |                  | (D) or Indirect<br>(I) (Instr. 4)   |   | Beneficial<br>Ownership<br>(Instr. 4)                                       |                                      |  |                                       |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |   |  |  |   |   |  |     |   |  |                  |   |                  |   |   |   |                                      |  |                                       |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)  | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date<br>if any<br>(Month/Day/Yea | Code (Instr.  |   | 5. Number of<br>Derivative<br>Securities<br>Acquired (A)<br>or Disposed of<br>(D) (Instr. 3, 4<br>and 5) |     | 6. Date Exercisabl<br>Expiration Date<br>(Month/Day/Year) |  | Securities Und   |   | s Unde           | rlying  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number derivative Securities Beneficial Owned Followin Reported Transact | re<br>es<br>ally<br>g                | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | Beneficial<br>Ownership<br>(Instr. 4) |
|  |   |  |  | Code  | v   | (A)  | (D) | Date<br>Exercisabl  |  | xpiration<br>ate | Title   |                  | unt or<br>ber of<br>es  | t or  |   |                                      |  |                                       |
| Restricted<br>Stock Unit   | (1)   | 02/08/2023                                 |  | A   |   | 4,888.221  |     | (2)   |  | (2)              | Common  | 4,88             | 88.221  | (1)   | 14,022  | .855                                 | D  |                                       |

## Explanation of Responses:

- $1.\ Each\ restricted\ stock\ unit\ (RSU)\ represents\ the\ contingent\ right\ to\ receive\ one\ share\ of\ common\ stock\ of\ MKS\ Instruments,\ Inc.$
- 2. These RSUs were subject to performance criteria, the achievement of which was determined on February 8, 2023, and thereafter vest in three equal annual installments beginning on February 15, 2023, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.

/s/ M. Kathryn Rickards, 02/09/2023 attorney-in-fact

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- $^{\ast}$  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.