

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL
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STATEMENT OF CHANGES IN 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 *		2. Issuer Name and Ticker or Trading Symbol		5. Relationship of Reporting Person(s) to Issuer (Check all applicable)	
Mears Robert J		Atomera Inc [ATOM]		<input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) Chief Technology Officer	
(Last) (First) (Middle)		3. Date of Earliest Transaction (MM/DD/YYYY)			
C/O ATOMERA, INC., 750 UNIVERSITY AVENUE, SUITE 280		9/1/2022			
(Street)		4. If Amendment, Date Original Filed (MM/DD/YYYY)		6. Individual or Joint/Group Filing (Check Applicable Line)	
LOS GATOS, CA 95032				<input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person	
(City) (State) (Zip)					

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. 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	9/1/2022		M		10000 (1)	A	\$3.90	127728	D	
Common Stock	9/1/2022		S		10000 (2)	D	\$11.58	117728	D	
Common Stock	9/1/2022		S		970 (3)	D	\$12.33	116758	D	
Common Stock	9/1/2022		S		594 (3)	D	\$12.33	116164	D	
Common Stock	9/1/2022		S		255 (3)	D	\$12.33	115909	D	
Common Stock	9/1/2022		S		121 (3)	D	\$12.34	115788	D	
Common Stock	9/2/2022		S		2800 (2)	D	\$12.27	112988	D	
Common Stock								2666	I	by Spouse

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

1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Trans. Date	3A. Deemed Execution Date, if any	4. Trans. 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		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 of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Employee Stock Option (right to buy)	\$3.90	9/1/2022		M		10000 (1)		6/1/2019	2/27/2029	Common Stock	10000	\$0	66923	D	

Explanation of Responses:

- The option exercise reported in this Form 4 was effected pursuant to a Rule 10b5-1 trading plan adopted by the Reporting Person and exercised from a previously reported total.
- The sale reported in this Form 4 was effected pursuant to a Rule 10b5-1 trading plan adopted by the Reporting Person.
- Represents the number of shares sold by the Reporting Person to cover tax withholding obligations in connection with the vesting of restricted stock grants that were previously reported. This sale is to satisfy mandatory non-discretionary tax withholding obligations by a "sell to cover" transaction.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Mears Robert J C/O ATOMERA, INC. 750 UNIVERSITY AVENUE, SUITE 280 LOS GATOS, CA 95032			Chief Technology Officer	

Signatures

/s/ Robert J. Mears, by Mindi Zimmer, as Attorney-in-Fact

^{**}Signature of Reporting Person

9/2/2022

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 control number.