FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE** COMMISSION

Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287 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*  Nashat Amir				2. Issuer Name <b>and</b> Ticker or Trading Symbol Morphic Holding, Inc. [ MORF ]								5. Relationship of F (Check all applicab X Director			Reporting Person(s) to Issu le) 10% Owne				
(Last) (First) (Middle)				3. Date of Earliest Transaction (Month/Day/Year) 06/28/2023									Office below	cer (give title ow)			Other (specify below)		
C/O POLARIS PARTNERS ONE MARINA PARK DRIVE, 8TH FL.				4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person						n	
(Street) BOSTON MA 02210												Form filed by More than One Reporting Person							
(City) (State) (Zip)			Rule 10b5-1(c) Transaction Indication																
(-9)				Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.															
		Table I	- Non-Derivat	ive S	ecuri	ties /	Acquir	ed, I					Own	ed					
in the or occurry (mean of			2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned		6. Ownership Form: Direct (D) or Indirect (I)		7. Nature of Indirect Beneficial Ownership (Instr.				
							Code	v	Amount	(A) or (D)	Price	Repor Trans	Reported Transaction(s) (Instr. 3 and 4)		(Instr. 4)		4)		
Common Stock			06/28/2023			J <sup>(1)</sup>		93,462	D	\$0.0	0 1,8	1,860,498		I	By Polaris Partners VII L.P. <sup>(2)(3)</sup>		rs VII,		
Common Stock		06/28/2023				J <sup>(4)</sup>		935	A	\$0.0	0	935		I	I M		By Polaris Management Co. VII L.L.C. <sup>(5)</sup>		
Common Stock			06/28/2023				J(6)		935	D	\$0.0	0	0		I		By Polaris Management Co. VII L.L.C. <sup>(5)</sup>		
Common Stock			06/28/2023				J <sup>(7)</sup>		145	A	\$0.0	0	145		D				
Common Stock			06/28/2023				J <sub>(8)</sub>		6,538	D	\$0.0	0 13	130,153		I	I En		By Polaris Entrepreneurs' Fund VII, L.P.	
		Tab	le II - Derivativ (e.g., put										Owne	d	,				
1. Title of Derivative Security (Instr. 3)	tle of 2. 3. Transaction 3A. Description Date Execution if any		3A. Deemed Execution Date, if any	4. Transaction Code (Instr. 8)		5. Number of Derivat Securit Acquir (A) or Dispos of (D) (Instr. 3	6. D Exp (Mo	ate E	exercisable an n Date lay/Year)	d 7. An Se Un De Se	Fitle and nount of curities derlying rivative curity str. 3 and	8. Pr Deri Secu (Inst	vative urity			10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		11. Nature of Indirect Beneficial Ownership (Instr. 4)	
Explanatio				Code	v	Date (A) (D) Exercisab		Expiration Date	on Titl	Amo or Num of Shar	ber	er							

- 1. Represents a pro-rata distribution, and not a purchase or sale, without additional consideration by Polaris Partners VII, L.P. ("PP VII") to its partners.
- 2. The shares are owned directly by PP VII. Polaris Management Co. VII, L.L.C. ("PMC VII") is the general partner of PP VII. The Reporting Person, a member of the Issuer's Board of Directors, is a member of PMC VII. Each of the Reporting Person, David Barrett ("Barrett"), Brian Chee ("Chee"), and Bryce Youngren ("Youngren" and, together with the Reporting Person, Barrett, and Chee, the "Managing Members") are the managing members of PMC VII.
- 3. Each of the Managing Members, in their respective capacities with respect to PMC VII, may be deemed to have shared voting and dispositive power over the shares held by PP VII. Each of PMC VII and the Managing Members disclaims beneficial ownership of these securities and this report shall not be deemed an admission that any one of them is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of their respective pecuniary interests therein.
- 4. Represents a change in the form of ownership of PMC VII by virtue of the receipt of shares in the pro-rata in-kind distribution of common stock of the Issuer for no consideration by PP VII.
- 5. The shares are owned by PMC VII. Each of the Managing Members, in their respective capacities with respect to PMC VII, may be deemed to have shared voting and dispositive power over the shares held by PMC VII. The Managing Members disclaim beneficial ownership of these securities and this report shall not be deemed an admission that any one of them is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of their respective pecuniary interests therein.
- 6. Represents a pro-rata distribution, and not a purchase or sale, without additional consideration by PMC VII to its interest holders.
- 7. Represents a change in the form of ownership of the Reporting Person by virtue of the receipt of shares as a result of the pro-rata in-kind distribution of common stock of the Issuer for no

consideration by PMC VII.

- 8. Represents a pro-rata distribution, and not a purchase or sale, without additional consideration by Polaris Entrepreneurs' Fund VII, L.P. ("PEF VII") to its partners.
- 9. The shares are owned directly by PEF VII. PMC VII is the general partner of PEF VII. Each of the Managing Members, in their respective capacities with respect to PMC VII, may be deemed to have shared voting and dispositive power over the shares held by PEF VII. Each of PMC VII and the Managing Members disclaims beneficial ownership of these securities and this report shall not be deemed an admission that any one of them is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of their respective pecuniary interests therein.

#### Remarks:

/s/ Lauren Crockett, Attorney-06/30/2023 in-Fact for Amir Nashat

\*\* 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.