SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Schedule 13G

(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED
PURSUANT TO RULES 13d-1 (b), (c) AND (d) AND AMENDMENTS THERETO FILED
PURSUANT TO 13d-2 (b)

(Amendment No. 2)

Morphic Holding, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share (Title of Class of Securities)

61775R105 (CUSIP Number)

December 31, 2023 (Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

☐ Rule 13d-1(b)

☐ Rule 13d-1(c)

☑ Rule 13d-1(d)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(Continued on following pages)

1	NAME OF REPORTING PERSONS			
	Polaris Partners VII, L.P.			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) □ (b) ⊠			
3	SEC USE ONLY			
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
	Delaware			
"		5	SOLE VOTING POWER	
NU	MBER OF		1,860,498 (1)	
5	SHARES		SHARED VOTING POWER	
	EFICIALLY WNED BY		0	
DE	EACH PORTING	7	SOLE DISPOSITIVE POWER	
	PERSON WITH		1,860,498 (1)	
			SHARED DISPOSITIVE POWER	
			0	
9	AGGREGAT	E AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	1,860,498 (1)			
10				
11	PERCENT C	F CLAS	SS REPRESENTED BY AMOUNT IN ROW 9	
	3.7% (2)			
12	TYPE OF RI	EPORTII	NG PERSON	
	PN			

- (1) All such are held of record by PP VII (as defined in Item 2(A) of the Original Schedule 13). PMC VII (as defined in Item 2(A) of the Original Schedule 13), the general partner of PP VII, may be deemed to have voting, investment and dispositive power with respect to these securities. David Barrett, Brian Chee, Amir Nashat, a member of the Issuer's board of directors, and Bryce Youngren are the managing members of PMC VII and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Based on 49,742,966 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as reported on the Issuer's Quarterly Report on Form 10-Q, for the quarter ended September 30, 2023, as filed with the United States Securities and Exchange Commission on November 3, 2023 (the "Form 10-Q").

1	NAME OF REPORTING PERSONS			
	Polaris Entrepreneurs' Fund VII, L.P.			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			
	(a) □ (t	o) 🗵		
3	SEC USE O	NLY		
4	CITIZENSU	ID OD D	I A CE OE OD CANIZATION	
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
	Delaware			
		5	SOLE VOTING POWER	
NU	NUMBER OF SHARES		130,153 (1)	
			SHARED VOTING POWER	
	EFICIALLY WNED BY		0	
DE	EACH REPORTING PERSON WITH		SOLE DISPOSITIVE POWER	
			130,153 (1)	
			SHARED DISPOSITIVE POWER	
			0	
9	AGGREGAT	ГЕ АМО	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	130,153 (1)			
10				
11	_	OF CLAS	SS REPRESENTED BY AMOUNT IN ROW 9	
12	0.3% (2)	EPORTI	NG PERSON	
	THE OF REPORTING LEADON			
	PN			

- (1) All such are held of record by PEF VII (as defined in Item 2(A) of the Original Schedule 13). PMC VII, the general partner of PEF VII, may be deemed to have voting, investment and dispositive power with respect to these securities. David Barrett, Brian Chee, Amir Nashat, a member of the Issuer's board of directors, and Bryce Youngren are the managing members of PMC VII and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Based on 49,742,966 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as reported on the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSONS			
	Polaris Management Co. VII, L.L.C.			
2	2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) □ (b) ⊠			
	(a) □ (b)) 🖾		
3	SECTISE OF	NII V		
3	SEC USE ONLY			
4	CITIZENSH	IP OR P	LACE OF ORGANIZATION	
	CITIZETOII	ii oiti	ENDE OF OROTHIE MION	
	Delaware			
		5	SOLE VOTING POWER	
NU	MBER OF		0	
\$	SHARES	6	SHARED VOTING POWER	
	IEFICIALLY			
O	WNED BY		1,990,651 (1)	
DE	EACH EPORTING	7	SOLE DISPOSITIVE POWER	
	PERSON			
	WITH		SHARED DISPOSITIVE POWER	
		8	SHARED DISPOSITIVE POWER	
			1,990,651 (1)	
9	AGGREGAT	ГЕ АМО	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	1,990,651 (1			
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
11	PERCENT C	OF CLAS	SS REPRESENTED BY AMOUNT IN ROW 9	
	4.00/. (2)			
12	4.0% (2) TYPE OF REPORTING PERSON			
12	TIFE OF KI	EFUKIII	NO LEASON	
	00			

Based on 49,742,966 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as reported on the Issuer's Form 10-Q.

^{(1) 1,860,498} of such shares are held of record by PP VII and 130,153 of such shares are held of record by PEF VII. PMC VII, the general partner of each of PP VII and PEF VII, may be deemed to have voting, investment and dispositive power with respect to these securities. David Barrett, Brian Chee, Amir Nashat, a member of the Issuer's board of directors, and Bryce Youngren are the managing members of PMC VII and may each be deemed to share voting, investment and dispositive power with respect to these securities.

1	NAME OF REPORTING PERSONS			
	David Barrett			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			
	(a) □ (b	o) 🗵		
3	SEC USE ONLY			
4	CITIZENSH	IP OR P	LACE OF ORGANIZATION	
	United States	5 5	SOLE VOTING POWER	
			145 (1)	
	MBER OF SHARES	6	145 (1) SHARED VOTING POWER	
BENEFICIALLY			1,000,651,60	
	VNED BY EACH	7	1,990,651 (2) SOLE DISPOSITIVE POWER	
	REPORTING PERSON WITH		145 (1)	
1			145 (1) SHARED DISPOSITIVE POWER	
			1 000 (51 (2)	
9	AGGREGAT	ГЕ АМО	1,990,651 (2) UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	1 000 706 (1)	. (2)		
10	1,990,796 (1) (2) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
11	□ 1 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9			
12	4.0% (3) TYPE OF RI	EPORTII	NG PERSON	
	IN			

- (1) All of such shares are held by David Barrett directly.
- (2) 1,860,498 of such shares are held of record by PP VII and 130,153 of such shares are held of record by PEF VII. PMC VII, the general partner of each of PP VII and PEF VII, may be deemed to have voting, investment and dispositive power with respect to these securities. David Barrett, Brian Chee, Amir Nashat, a member of the Issuer's board of directors, and Bryce Youngren are the managing members of PMC VII and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (3) Based on 49,742,966 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as reported on the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSONS			
	Brian Chee			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			
	(a) □ (b) ⊠			
3	SEC USE ONLY			
4	CITIZENSH	TP OR P	LACE OF ORGANIZATION	
	United States		SOLE VOTING POWER	
		5	SOLE VOTING POWER	
NU	NUMBER OF		0	
	SHARES	6	SHARED VOTING POWER	
	EFICIALLY VNED BY		1,990,651 (1)	
D.F.	EACH REPORTING PERSON WITH		SOLE DISPOSITIVE POWER	
			SHARED DISPOSITIVE POWER	
			1,990,651 (1)	
9	AGGREGAT	ГЕ АМО	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	1,990,651 (1) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
10	CHECK BOA IF THE AGGREGATE AMOUNT IN ROW (9) EACLUDES CERTAIN SHARES			
11	PERCENT C	OF CLAS	SS REPRESENTED BY AMOUNT IN ROW 9	
	4.0% (2)			
12	TYPE OF R	EPORTI	NG PERSON	
	IN			
	1			

- (1) 1,860,498 of such shares are held of record by PP VII and 130,153 of such shares are held of record by PEF VII. PMC VII, the general partner of each of PP VII and PEF VII, may be deemed to have voting, investment and dispositive power with respect to these securities. David Barrett, Brian Chee, Amir Nashat, a member of the Issuer's board of directors, and Bryce Youngren are the managing members of PMC VII and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Based on 49,742,966 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as reported on the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSONS			
	Amir Nashat			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			
	(a) □ (b	o) 🗵		
2	SEC USE O	ATT X7		
3	SEC USE OF	NLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
	United States	s		
		5	SOLE VOTING POWER	
NU	MBER OF	6	39,605 (1)	
	SHARES		SHARED VOTING POWER	
	EFICIALLY WNED BY		1,990,651 (2)	
	EACH	7	SOLE DISPOSITIVE POWER	
REPORTING		·		
I	PERSON		39,605 (1)	
	WITH	8	SHARED DISPOSITIVE POWER	
			1,990,651 (2)	
9	AGGREGAT	TE AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	2,030,256 (1			
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
	П			
11	□ I PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9			
**	LINCLITIC	CL/10	SO TELLED ET TAMOUNT AVIOUT	
	4.1% (3)			
12	TYPE OF R	EPORTI	NG PERSON	
	INI			
	IN			

- (1) (i) 145 of such shares are held by Amir Nashat directly, and (ii) 39,460 of such shares subject to stock option awards that have been granted to Amir Nashat in his capacity as a director of the Issuer and that are exercisable as of or within 60 days of the filing of this Amendment (as defined in the Introductory Note below). Excludes 12,535 shares subject to stock option awards that have been granted to Amir Nashat in his capacity as a director of the Issuer and that are exercisable as of or within 60 days of the filing of this Amendment.
- 1,860,498 of such shares are held of record by PP VII and 130,153 of such shares are held of record by PEF VII. PMC VII, the general partner of each of PP VII and PEF VII, may be deemed to have voting, investment and dispositive power with respect to these securities. David Barrett, Brian Chee, Amir Nashat, a member of the Issuer's board of directors, and Bryce Youngren are the managing members of PMC VII and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (3) Based on 49,782,426 shares of the Issuer's Common Stock, calculated as follows (i) 39,460 shares of the Issuer's Common Stock subject to stock option awards that have been granted to Amir Nashat in his capacity as a director of the Issuer and that are exercisable as of or within 60 days of the filing of this Amendment plus (ii) 49,742,966 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as reported on the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSONS			
	D. V			
2	Bryce Young		OPRIATE BOX IF A MEMBER OF A GROUP	
2		E APPRO 5) ⊠	OPRIATE BOX IF A MEMBER OF A GROUP	
	(a) 🗆 (t	<i>5)</i> 🖾		
3	3 SEC USE ONLY			
4	CITIZENSH	IP OR P	LACE OF ORGANIZATION	
	United State		GOVE MOTERIC POWER	
		5	SOLE VOTING POWER	
NII	MBER OF		145 (1)	
	SHARES	6	SHARED VOTING POWER	
	EFICIALLY			
O	WNED BY		1,990,651 (2)	
	EACH	7	SOLE DISPOSITIVE POWER	
	PORTING PERSON			
1	WITH		145 (1)	
	***	8	SHARED DISPOSITIVE POWER	
			1,990,651 (2)	
9	AGGREGA	ГЕ АМО	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	1,990,796 (1			
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9			
- 11	FERCENT OF CLASS REFRESENTED BY AMOUNT IN ROW 9			
	4.0% (3)			
12	TYPE OF R	EPORTI	NG PERSON	
	IN			

- (1) All of such shares are held by Bryce Youngren directly.
- 1,860,498 of such shares are held of record by PP VII and 130,153 of such shares are held of record by PEF VII. PMC VII, the general partner of each of PP VII and PEF VII, may be deemed to have voting, investment and dispositive power with respect to these securities. David Barrett, Brian Chee, Amir Nashat, a member of the Issuer's board of directors, and Bryce Youngren are the managing members of PMC VII and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (3) Based on 49,742,966 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as reported on the Issuer's Form 10-Q.

SCHEDULE 13G

CUSIP #61775R105

Introductory Note.

This Amendment No. 2 (this "Amendment No. 2") amends and supplements the Schedule 13G originally filed by the Reporting Persons with the United States Securities and Exchange Commission (the "Commission"), as amended by Amendment No. 1 filed with the Commission on February 11, 2022 (collectively, the "Original Schedule 13G"). Only those items that are hereby reported are amended; all other items reported in the Original Schedule 13G remain unchanged. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable. Capitalized terms not defined in this Amendment No. 2 have the meanings ascribed to them in the Original Schedule 13G.

ITEM 2(B). ADDRESS OF PRINCIPAL OFFICE

The address for each of the Reporting Persons except for Chee is:

c/o Polaris Partners One Marina Park Drive, 8th Floor Boston, MA 02210

The address for Chee is:

c/o Polaris Partners 1 Letterman Drive Building C, Suite 3600 San Francisco, CA 94129

ITEM 4. OWNERSHIP

The approximate percentages of Common Stock reported as beneficially owned by the Reporting Persons are based upon 49,742,966 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as reported on the Issuer's Form 10-Q filed with the Commission on November 3, 2023.

The following information with respect to the ownership of the common stock of the Issuer by the Reporting Persons filing this Statement is provided as of December 31, 2023:

(a) Amount beneficially owned:

See Row 9 of cover page for each Reporting Person.

(b) Percent of Class:

See Row 11 of cover page for each Reporting Person.

- (c) Number of shares as to which such person has:
- (i) Sole power to vote or to direct the vote:

See Row 5 of cover page for each Reporting Person.

(ii) Shared power to vote or to direct the vote:

See Row 6 of cover page for each Reporting Person.

(iii) Sole power to dispose or to direct the disposition of:

See Row 7 of cover page for each Reporting Person.

(iv) Shared power to dispose or to direct the disposition of:

See Row 8 of cover page for each Reporting Person.

* Except to the extent of their pecuniary interest therein, each Reporting Person disclaims beneficial ownership of such shares of Common Stock, except for the shares, if any, such Reporting Person holds of record.

ITEM5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

X

Date: February 9, 2024

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

POLARIS PARTNERS VII, L.P.			
By:	Polaris Management Co. VII, L.L.C.		
By:	*		
	Authorized Signatory		
POLAR	IS ENTREPRENEURS' FUND VII, L.P.		
By:	Polaris Management Co. VII, L.L.C.		
By:	*		
•	Authorized Signatory		
POLAR	IS MANAGEMENT CO. VII, L.L.C.		
By:	*		
•	Authorized Signatory		
BRYCE	YOUNGREN		
By:	*		
•	Bryce Youngren		
DAVID	BARRETT		
By:	*		
	David Barrett		
BRIAN	CHEE		
By:	*		
	Brian Chee		
AMIR NASHAT			
By:	*		
	Amir Nashat		
*By:	/s/ Lauren Crockett		
Name:	Lauren Crockett		

Attorney-in-Fact

[*This Schedule 13G was executed pursuant to a Power of Attorney. Note that copies of the applicable Powers of Attorney are already on file with the appropriate agencies.]