UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (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)

Peter Haahr Novo Holdings A/S Tuborg Havnevej 19 Hellerup, Denmark DK-2900 +45 3527 6592

Copy to:

B. Shayne Kennedy, Esq. Latham & Watkins LLP 650 Town Center Drive, 20th Floor Costa Mesa, CA 92626 Telephone: (714) 540-1235 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

August 6, 2021 (Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is subject of this Schedule 13D, and is filing this statement because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7(b) for other parties to whom copies are to be sent.

* 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 (the "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).

CUSIP No.: 61775R105

| CUSIP No.: 61775R105 | | | | | | | |
|-----------------------|---|---------|--|--|--|--|--|
| 1. | Name of Reporting Person: | | | | | | |
| | Novo I | Holdir | ngs A/S | | | | |
| 2. | Novo Holdings A/S 2. Check the Appropriate Box if a Member of Group (See Instructions): | | | | | | |
| (a) \Box (b) \Box | | | | | | | |
| | SEC Use Only: | | | | | | |
| 3. | SEC U | se On | 19: | | | | |
| 4. | Source of Funds: | | | | | | |
| | WC | | | | | | |
| 5. | Check | if Dis | closure of Legal Proceedings is Required Pursuant to <u>Items 2(d)</u> or <u>2(e):</u> | | | | |
| | | | | | | | |
| 6. | Citizer | iship c | or Place of Organization: | | | | |
| | Denne |]. | | | | | |
| | Denmark 7. Sole Voting Power: | | | | | | |
| | | | | | | | |
| | nber of | | 2,050,446 | | | | |
| | nares | 8. | Shared Voting Power: | | | | |
| | eficially ned By | | 0 | | | | |
| E | lach | 9. | Sole Dispositive Power: | | | | |
| | oorting | | | | | | |
| | erson Vith: | 10 | 2,050,446 Shared Dispositive Power: | | | | |
| | | 10. | Shared Dispositive Power: | | | | |
| | | | 0 | | | | |
| 11. | Aggreg | gate A | mount Beneficially Owned by Each Reporting Person: | | | | |
| | 2,050,4 | 146 | | | | | |
| 12. | | | Aggregate Amount in Row (11) Excludes Certain Shares: | | | | |
| | | | | | | | |
| 10 | | | | | | | |
| 13. | Percen | ι 01 C. | lass Represented By Amount In Row (11): | | | | |
| | 5.6% (1) | | | | | | |
| 14. | Туре о | f Repo | orting Person: | | | | |
| | СО | | | | | | |
| L | | | | | | | |

(1) Based upon 36,451,080 shares of the Issuer's Common Stock outstanding as of August 2, 2021, as reported in the Issuer's Form S-3 Registration Statement filed with the Securities and Exchange Commission ("SEC") on August 4, 2021.

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This amendment ("Amendment No. 2"), amends the Schedule 13D originally filed with the Securities and Exchange Commission ("SEC") on July 1, 2019, as subsequently amended by Amendment No. 1 filed on March, 11 2021 (collectively, the "Schedule") to report the sale of shares by Novo Holdings A/S. All capitalized terms contained herein but not otherwise defined shall have the meaning ascribed to such terms in the Schedule.

Item 2. Identity and Background

Item 2 is amended and replaced in its entirety as follows:

(a) Novo Holdings A/S is a Danish corporation that is wholly owned by Novo Nordisk Foundation (the "Foundation"), a Danish commercial foundation. Novo Holdings A/S is the holding company in the group of Novo companies (currently comprised of Novo Nordisk A/S and Novozymes A/S) and is responsible for managing the Foundation's assets, including its financial assets. Based on the governance structure of Novo Holdings A/S and the Foundation, the Foundation is not deemed to have any beneficial ownership of the securities of the Issuer held by Novo Holdings A/S.

The name of each director and executive officer of both Novo Holdings A/S and the Foundation is set forth on <u>Schedule I</u> to this Schedule 13D.

(b) The business address of both Novo Holdings A/S and the Foundation is Tuborg Havnevej 19, 2900 Hellerup, Denmark.

The residence or business address of each director and executive officer of both Novo Holdings A/S and the Foundation is set forth on <u>Schedule I</u> to this Schedule 13D.

(c) Novo Holdings A/S, a holding company that is responsible for managing the Foundation's assets, provides seed and venture capital to development stage companies and invests in well-established companies within the life science and biotechnology sector.

The Foundation is a Danish self-governing and profit-making foundation, whose objectives are to provide a stable basis for commercial and research activities undertaken by the group of Novo companies and to support scientific, humanitarian and social purposes through grants.

- (d) Within the last five years, neither Novo Holdings A/S, the Foundation, nor any person named in <u>Schedule I</u> has been convicted in any criminal proceedings.
- (e) Within the last five years, neither Novo Holdings A/S, the Foundation, nor any person named in <u>Schedule I</u> was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 5. Interest in Securities of the Issuer

Item 5 of the Schedule is amended and replaced in its entirety as follows:

(a) Novo Holdings A/S beneficially owns 2,050,446 shares of Common Stock (the "Novo Shares") representing approximately 5.6% of the Issuer's outstanding shares of Common Stock, Based upon 36,451,080 shares of the Issuer's Common Stock outstanding as of August 2, 2021, as reported in the Issuer's Form S-3 Registration Statement filed with the SEC on August 4, 2021.

(b)Novo Holdings A/S is a Danish corporation wholly owned by the Novo Nordisk Foundation. Novo Holdings A/S has the sole power to vote and dispose of the Novo Shares. Neither the Foundation nor any person listed on Schedule I is deemed to have any beneficial ownership in the Novo Shares.

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(c) Novo Holdings A/S has not effected any transactions in the Issuer's Common Stock within the past 60 days and neither the Foundation nor any person listed on <u>Schedule I</u> has effected any transactions in the Issuer's Common Stock within the past 60 days.

(d) Novo Holdings A/S does not know of any other person having the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of the Novo Shares.

(e) Not applicable.

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SIGNATURE

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.

Dated: August 11, 2021

Novo Holdings A/S

/s/ Peter Haahr

By: Peter Haahr

Its: Chief Financial Officer

Signature Page to Schedule 13D/A Novo Holdings: Novo Holdings A/S Issuer: Mo

Issuer: Morphic Holding, Inc.

<u>Schedule I</u>

Information regarding each director and executive officer of both Novo Holdings A/S and the Novo Nordisk Foundation is set forth below.

Novo Holdings A/S

| Name, Title | Address | Principal Occupation | Citizenship |
|---|---|--|----------------|
| Lars Rebien Sørensen, Chairman of the Board | Christianholms Tværvej 27, 2930 Klampenborg Denmark | Professional Board Director | Denmark |
| Steen Riisgaard, Vice Chairman of the Board | Hestetangsvej 155, 3520 Farum, Denmark | Professional Board Director | Denmark |
| Jean-Luc Butel, Director | 235 Arcadia Road unit # 10-3 289843 Singapore | Global Healthcare Advisor, President, K8 Global Pte Ltd. | Singapore |
| Jeppe Christiansen, Director | c/o Kasper Fonager Christiansen Classensgade 59, 5. th. 2100 Kobenhavn Ø Denmark | Chief Executive Officer, Fondsmaeglerselskabet Maj Invest A/S | Denmark |
| Francis Michael Cyprian Cuss, Director | 111 Rippling Brook Way, Bernardsville, NJ 07924 USA | Former Executive Vice President and Chief Scientific Officer of Bristol-Myers Squibb | United Kingdom |
| Viviane Monges, Director | Chemin de Craivavers 32, 1012 Lausanne, Switzerland | Professional Board Director | France |
| Henrik Poulsen, Director | Emiliekildevej 36 2930 Klampenborg Denmark | Professional Board Director and Senior Advisor, A.P. Møller Holding A/S, | Denmark |
| Poul Carsten Stendevad, Director | 3220 Idaho Ave NW Washington, DC 20016 USA | Co-Chief Investment Officer for Sustainability, Bridgewater Associates | Denmark |
| Kasim Kutay, Chief Executive Officer of Novo Holdings A/S | Bredgade 65, 3.tv. 1260 Copenhagen K. Denmark | Chief Executive Officer of Novo Holdings A/S | United Kingdom |
| Peter Haahr, Chief Financial Officer of Novo Holdings A/S | Ordrup Have 21 2920 Charlottenlund Denmark | Chief Financial Officer of Novo Holdings A/S | Denmark |

Novo Nordisk Foundation

Principal Occupation Professional Board Director Citizenship

Denmark

| Name, Title | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|
| Lars Rebien Sørensen, | | | | | | | |
| Chairman of the Board | | | | | | | |

Christianholms Tværvej 27 2930 Klampenborg Denmark

Address

Novo Nordisk Foundation

| Name, Title | Address | Principal Occupation | Citizenship |
|---|--|---|-------------|
| Marianne Philip, Vice Chairman of the Board | Annasvej 28 2900 Hellerup Denmark | Attorney | Denmark |
| Steen Riisgaard, Director | Hestetangsvej 155 3520 Farum Denmark | Professional Board Director | Denmark |
| Mads Krogsgaard Thomsen, Chief Executive Officer | Præstevejen 38 3230 Græsted Denmark | Chief Executive Officer, Novo Nordisk Foundation | Denmark |
| Anne Marie Kverneland, Director | Nybrovej 216 2800 Kgs. Lyngby Denmark | Laboratory technician, Novo Nordisk A/S | Denmark |
| Lars Bo Køppler, Director | Anemonevej 7 3550 Slangerup Denmark | Technician, Novozymes A/S | Denmark |
| Lars Henrik Fugger, Director | 72 Staunton Road, Headington Great Britain | Professor, John Radcliffe Hospital, University of Oxford, Oxford, Great Britain | Denmark |
| Lars Henrik Munch, Director | Galionsvej 46 1437 Copenhagen K Denmark | Professional Board Director | Denmark |
| Mads Boritz Grøn, Director | Horsevænget 4 3400 Hillerød Denmark | Senior Lead Auditor | Denmark |
| Liselotte Højgaard, Director | Grønningen 21 1270 Copenhagen K Denmark | Professor | Denmark |