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

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

MARPAI, INC.

(Exact name of registrant as specified in its charter)

	Delaware		8	86-1916231	
	(State or other jurisdiction o ncorporation or organization		(I.R.S. Employer Identification No.)		
	5 Channelside Dr, Suite #2 Tampa, FL			33602	
(Addr	ess of Principal Executive O	ffices)		(Zip Code)	
		Marpai, Inc. 2024 Global (Full title of			
		Damien Lan Chief Executi Marpai, 615 Channelside D Tampa, Flori (Name and address of (855) 389 (Telephone number, including ar Copy of Oded Han Ron Ben- Sullivan & Woi 1251 Avenue of t New York, N Telephone: (21)	ve Officer Inc. Drive, Suite 207 ida 33602 agent for service) -7330 ea code, of agent for service) to: -Even Bassat recester LLP the Americas IY 10020		
			on-accelerated filer, smaller reporting c and "emerging growth company" in Rul	ompany, or an emerging growth company. See e 12b-2 of the Exchange Act.	
Large accelerated filer □	Accelerated filer □	Non-accelerated filer ⊠	Smaller reporting company ⊠	Emerging growth company ⊠	

f an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial ecounting standards provided pursuant to Section 13(a) of the Exchange Act.						

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information required in Part I of this registration statement have been or will be sent or given to participating employees as specified in Rule 428(b)(1) under the Securities Act of 1933, as amended, or the Securities Act, in accordance with the rules and regulations of the United States Securities and Exchange Commission, or the Commission. Such documents are not being filed with the Commission either as part of this registration statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act. These documents and the documents incorporated by reference into this registration statement pursuant to Item 3 of Part II of this registration statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following additional documents, which have been filed by Marpai, Inc., or the Company, with the Commission under the Securities Exchange Act of 1934, as amended, or the Exchange Act, are incorporated by reference in and made a part of this registration statement, as of their respective dates:

- (a) The Company's Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 26, 2024;
- (b) The Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, as filed with the SEC on May 9, 2024;
- (c) The Company's Current Reports on Form 8-K filed with the SEC on <u>January 17, 2024</u>, <u>January 18, 2024</u>, <u>February 8, 2024</u>, <u>March 8, 2024</u>, <u>April 17, 2024</u>, May 6, 2024 and May 15, 2024; and
- (d) The description of the Company's Common Stock contained in the Registration Statement on Form 8-A filed with the Commission on October 12, 2021, under the Exchange Act, including any amendment or report filed or to be filed for the purpose of updating such description.

In addition to the foregoing, all documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequently filed by the Company prior to the filing of a post-effective amendment which indicates that all securities offered hereunder have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be part hereof from the date of filing of such documents and reports.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement herein, or in any subsequently filed document which also is or is deemed to be incorporated by reference, modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not Applicable.

Item 6. Indemnification of Directors and Officers.

The certificate of incorporation and the by-laws of the Company, each as amended to date, provide that the Company will indemnify, to the fullest extent permitted by the General Corporation Law of the State of Delaware, each person who is or was a director, officer, employee or agent of the Company, or who serves or served any other enterprise or organization at the request of the Company. Pursuant to Delaware law, this includes elimination of liability for monetary damages for breach of the directors' fiduciary duty of care to the Company and its stockholders. These provisions do not eliminate the directors' duty of care and, in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to the Company, for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for any transaction from which the director derived an improper personal benefit, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not

affect a director's responsibilities under any other laws, such as the federal securities laws or state or federal environmental laws.

Section 145 of the Delaware General Corporation Law permits a corporation to indemnify any director or officer of a corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reasonable cause to believe his or her conduct was unlawful. In a derivative action (i.e., one brought by or on behalf of the corporation), indemnification may be provided only for expenses actually and reasonably incurred by any director or officer in connection with the defense or settlement of such an action or suit if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be provided if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the Delaware Chancery Court or the court in which the action or suit was brought shall determine that such person is fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

The Company's Certificate of Incorporation provides that the Company shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Company or, while a director or officer of the Company, is or was serving at the Company's request as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such indemnified person in such proceeding.

In connection therewith, the Company has agreed to pay the expenses (including attorneys' fees) incurred by an any such person in defending any such proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of such proceeding shall be made only upon receipt of an undertaking by such person to repay all amounts advanced if it should be ultimately determined that such person is not entitled to be indemnified under the Company's Certificate of Incorporation.

In addition, the Company may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Company or, while an employee or agent of the Company, is or was serving at the Company's request as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such person in connection with such proceeding. We may pay the expenses (including attorneys' fees) incurred by an employee or agent in defending any proceeding in advance of its final disposition on such terms and conditions as may be determined by the Company's board of directors.

The Company's board of directors may, to the full extent permitted by applicable law, authorize an appropriate officer or officers to purchase and maintain at the Company's expense insurance: (a) to indemnify the Company for any obligation which it incurs as a result of the indemnification of directors, officers and employees; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of the Company's Certificate of Incorporation.

The Company has entered into agreements with the Company's directors and executive officers that require the Company to indemnify these persons against expenses, judgments, fines, settlements and other amounts actually and reasonably incurred (including expenses of a derivative action) in connection with any proceeding, whether actual or threatened, to which any such person may be made a party by reason of the fact that the person is or was a director or officer of the Company or any of the Company's affiliated enterprises, provided the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the Company's best interests and, with

respect to any criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful. The indemnification agreements also establish procedures that will apply if a claim for indemnification arises under the agreements.

The Company maintains director and officer liability insurance that provides financial protection for the Company's directors and officers if they are sued in connection with the performance of their services and provides employment practices liability coverage, which insures for harassment and discrimination suits.

Item 7. Exemption from Registration Claimed.

Not Applicable.

Item 8. Exhibits.

Exhibit	
No.	Description
<u>4.1</u>	Second Amended and Restated Certificate of Incorporation of the Company dated July 8, 2021 (incorporated by reference to Exhibit 3.5 of the Company's
	Annual Report on Form 10-K filed on March 30, 2022).
<u>4.2</u>	Amendment to Second Amended and Restated Certificate of Incorporation of the Registrant, dated September 2, 2021 (incorporated by reference to Exhibit
	3.6 of the Company's Annual Report on Form 10-K filed on March 30, 2022).
<u>4.3</u>	Certificate of Amendment to Certificate of Incorporation of the Company (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form
	8-K filed on June 29, 2023).
<u>4.4</u>	Bylaws of the Company (incorporated by reference to Exhibit 3.3 of the Company's Annual Report on Form 10-K filed on March 30, 2022).
<u>5.1*</u>	Opinion of Sullivan & Worcester LLP.
23.1*	Consent of Sullivan & Worcester LLP (contained in the opinion of Sullivan & Worcester LLP filed herewith as Exhibit 5.1).
<u>23.2*</u>	Consent of UHY LLP.
24.1*	Powers of Attorney (included in the signature page to this registration statement).
99.1	The Company's 2024 Global Stock Incentive Plan (incorporated by reference from the Company's definitive proxy statement on Schedule 14A filed with the
	Commission on April 17, 2024).
<u>107*</u>	Filing Fee Table.

* Filed herewith.

Item 9. Undertakings.

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that subparagraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in the periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned registrant hereby further undertakes that, for the purposes of determining any liability under the Securities Act of 1933, each filing of the Company's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Tampa, Florida, on May 22, 2024.

MARPAI, INC.

By: /s/ Damien Lamendola

Damien Lamendola

Chief Executive Officer and Director (Principal Executive Officer)

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Marpai, Inc., hereby constitute and appoint Damien Lamendola and Steve Johnson and each of them singly, the Company's true and lawful attorneys-in-fact, with full power to them in any and all capacities, to sign any and all amendments to this registration statement on Form S-8 (including any post-effective amendments thereto), and to file the same, with exhibits thereto and other documents in connection therewith, with the Commission, hereby ratifying and confirming all that each of said attorneys-in-fact may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Damien Lamendola Damien Lamendola	Chief Executive Officer and Director (Principal Executive Officer)	May 22, 2024
/s/ Steve Johnson Steve Johnson	Principal Financial and Accounting Officer	May 22, 2024
/s/ Yaron Eitan Yaron Eitan	Chairman of the Board of Directors	May 22, 2024
/s/ Jennifer Calabrese Jennifer Calabrese	Director	May 22, 2024
/s/ Sagiv Shiv Sagiv Shiv	Director	May 22, 2024
/s/ Mohsen Moazami Mohsen Moazami	Director	May 22, 2024
/s/ Robert Pons Robert Pons	Director	May 22, 2024
/s/ Colleen DiClaudio Colleen DiClaudio	Director	May 22, 2024

Marpai, Inc. 615 Channelside Drive, Suite 207 Tampa, Florida 33610

Re: Marpai, Inc. Registration Statement on Form S-8

Dear Ladies and Gentlemen:

In connection with the registration under the Securities Act of 1933, as amended (the "Act"), by Marpai, Inc., a Delaware corporation (the "Company"), of 2,277,910 shares of its common stock, par value \$0.0001 per share (the "Registered Shares"), that are to be offered and may be issued under the Company's 2024 Global Stock Incentive Plan, as amended (the "Plan"), the following opinion is furnished to you to be filed with the Securities and Exchange Commission (the "Commission") as Exhibit 5.1 to the Company's Registration Statement on Form S-8 (the "Registration Statement") under the Act.

We have acted as counsel to the Company in connection with the Registration Statement, and we have examined originals or copies, certified or otherwise identified to our satisfaction, of the Registration Statement, the Certificate of Incorporation of the Company as currently in effect, the amended and restated bylaws as currently in effect, the minute books and corporate records of the Company, and such other documents as we have considered necessary and appropriate in order to furnish the opinion hereinafter set forth.

We express no opinion herein as to any laws other than the Delaware General Corporation Law, and we express no opinion as to state securities or blue sky laws.

Based on and subject to the foregoing, we are of the opinion that, when issued in accordance with the terms of the Plan and the options or other rights granted thereunder, the Registered Shares will be duly authorized, validly issued, fully paid and nonassessable by the Company.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm in the Prospectus forming a part of the Registration Statement. In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Sullivan & Worcester LLP Sullivan & Worcester LLP



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 26, 2024 relating to the
consolidated financial statements of Marpai, Inc. and subsidiaries (the "Company"), appearing in the Annual Report on Form 10-K of the Compan
for the year ended December 31, 2023.

Melville, NY May 22, 2024

An Independent Member of Urbach Hacker Young International

Calculation of Filing Fee Tables

Form S-8 (Form Type)

Marpai, Inc.

(Exact Name of Registrant as Specified in its Charter)

Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation	Amount Registered (1)(2)	Proposed Maximum Offering Price Per Share (3)	Proposed Maximum Aggregate Offering Price	Fee Rate	Amount of Registratio n Fee
				Newly Registered	Securities			
Fees to Be Paid	Equity	Common Stock, par value \$0.0001 (3)	Rule 457(h)	2,277,910	\$1.97	\$4,487,482.7	\$0.0001476	\$662.36
	Total Offering	Amounts		•	\$1.97	\$4,487,482.7		\$662.36
Total Fees Previously Paid								
Total Fee Offsets								
	Net Fee Due							\$662.36

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended, or the Securities Act, this Registration Statement also covers an indeterminate number of additional securities which may be offered and issued to prevent dilution resulting from stock splits, stock dividends, recapitalizations or similar transactions.
- (2) Represents shares for Common Stock reserved for issuance upon the exercise of options or other awards that may be granted under the Company's 2024 Global Stock Incentive Plan (the "Plan") to which this Registration Statement relates.
- (3) The fee is based on the number of shares of Common Stock which may be issued under the Company's Plan this Registration Statement on Form S-8 relates to and is estimated in accordance with Rule 457(c) and (h) under the Securities Act solely for the purpose of calculating the registration fee based upon the average of the high and low sales price of Marpai, Inc.'s Common Stock as reported on the Nasdaq Capital Market on May 21, 2024.