Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Pacific Biosciences of California, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 16-1590339 (I.R.S. Employer Identification No.)

1305 O'Brien Drive Menlo Park, CA 94025 (Address of Principal Executive Offices) (Zip Code)

Pacific Biosciences of California, Inc. 2020 Equity Incentive Plan, as amended (Full title of the plan)

> Christian O. Henry Chief Executive Officer and President 1305 O'Brien Drive Menlo Park, CA 94025 (Name and address of agent for service)

(650) 521-8000 (Telephone number, including area code, of agent for service)

> Copies to: Andrew D. Hoffman Zachary B. Myers Wilson Sonsini Goodrich & Rosati, P.C. 650 Page Mill Road Palo Alto, CA 94304 (650) 493-9300

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	\boxtimes	Accelerated filer	
Non-accelerated filer		Smaller reporting company	
		Emerging growth company	

If 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 accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

This Registration Statement is being filed for the purpose of registering an additional 18,000,000 shares of common stock that were reserved for issuance under the 2020 Equity Incentive Plan. The Registrant previously filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-8 on <u>August 6, 2020</u> (SEC File No. 333-241687) (the "Prior Registration Statement"), registering shares of Common Stock issuable under the 2020 Equity Incentive Plan. This Registration Statement relates to securities of the same class as those to which the Prior Registration Statement relates and is submitted in accordance with General Instruction E of Form S-8 regarding Registration of Additional Securities. Pursuant to General Instruction E of Form S-8, the contents of the Prior Registration Statement are incorporated herein by reference and made part of this Registration Statement, except for Items 3 and 8, which are being updated by this Registration Statement.

PART II

INFORMATION REQUIRED IN REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

Pacific Biosciences of California, Inc. (the "Registrant") hereby incorporates by reference into this Registration Statement the following documents previously filed with the Commission:

(1) The Registrant's Annual Report on Form 10-K for its fiscal year ended December 31, 2021, filed with the Commission on February 28, 2022 pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act");

(2) All other reports filed with the Commission pursuant to Sections 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the Registrant's Annual Report referred to in (1) above (other than the portions of these documents not deemed to be filed); and

(3) The description of the Registrant's Common Stock contained in the Registrant's Registration Statement on <u>Form 8-A</u> (File No. 001-34899) filed with the Commission on October 6, 2010, pursuant to Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents; *provided, however*, that documents or information deemed to have been furnished and not filed in accordance with the rules of the Commission shall not be deemed incorporated by reference into this Registration Statement.

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

Item 8.	Exhibits.
Exhibit Number	Description
<u>4.1</u>	Specimen Common Stock Certificate of Registrant (which is incorporated herein by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1, as amended (Registration No. 333-168858), as declared effective on October 26, 2010)
<u>4.2</u>	Description of the Registrant's securities registered under Section 12 of the Exchange Act (which is incorporated herein by reference to Exhibit 4.2 to the Registrant's Form 10-K filed on February 28, 2022)
<u>5.1*</u>	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation
<u>23.1*</u>	Consent of Independent Registered Public Accounting Firm
<u>23.2*</u>	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (contained in Exhibit 5.1 hereto)
<u>23.3*</u>	Consent of KPMG LLP, Independent Auditors of Omnione, Inc.
<u>24.1*</u>	Power of Attorney (contained on signature page hereto)
<u>99.1+</u>	Pacific Biosciences of California, Inc. 2020 Equity Incentive Plan, as amended (which is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on May 26, 2022)
<u>99.2+</u>	Form of Global Stock Option Agreement under the Pacific Biosciences of California, Inc. 2020 Equity Incentive Plan, as amended (which is incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 8-K filed on May 26, 2022)
<u>99.3+</u>	Form of Global Restricted Stock Unit Agreement under the Pacific Biosciences of California, Inc. 2020 Equity Incentive Plan, as amended(which is incorporated herein by reference to Exhibit 10.3 to the Registrant's Form 8-K filed on May 26, 2022)
107*	Filing Fee Table

<u>107*</u> Filing Fee Table

+ Indicates management contract or compensatory plan, contract or arrangement. * Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, 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 Menlo Park, State of California, on May 26, 2022.

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

By: _____

Susan G. Kim Chief Financial Officer

/s/ Susan G. Kim

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Christian O. Henry, Susan G. Kim, Brett Atkins and Michele Farmer, and each of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for each individual in any and all capacities, to sign any and all amendments to this Registration Statement on Form S-8 of Pacific Biosciences of California, Inc., and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or the individual's substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Christian O. Henry Christian O. Henry	Director, Chief Executive Officer and President (Principal Executive Officer)	May 26, 2022
/s/ Susan G. Kim Susan G. Kim	Chief Financial Officer (Principal Financial Officer)	May 26, 2022
/s/ Michele Farmer Michele Farmer	Vice President and Chief Accounting Officer (Principal Accounting Officer)	May 26, 2022
/s/ John F. Milligan John F. Milligan	Chairman of the Board of Directors	May 26, 2022
/s/ David Botstein David Botstein	Director	May 26, 2022
/s/ William W. Ericson William W. Ericson	Director	May 26, 2022
/s/ Hannah A. Valantine Hannah A. Valantine	Director	May 26, 2022
/s/ Randall S. Livingston Randall S. Livingston	Director	May 26, 2022
/s/ Marshall L. Mohr Marshall L. Mohr	Director	May 26, 2022
/s/ Kathy Ordoñez Kathy Ordoñez	Director	May 26, 2022
/s/ Lucy Shapiro Lucy Shapiro	Director	May 26, 2022

Wilson Sonsini Goodrich & Rosati Professional Corporation

650 Page Mill Road Palo Alto, California 94304-1050

o: 650.493.9300 f: 650.493.6811

May 26, 2022

Pacific Biosciences of California, Inc. 1305 O'Brien Drive Menlo Park, CA 94025

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

WILSON

SONSINI

We have examined the Registration Statement on Form S-8 (the "Registration Statement") to be filed by Pacific Biosciences of California, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission on or about the date hereof, in connection with the registration under the Securities Act of 1933, as amended, of 18,000,000 shares of the Company's common stock, par value \$0.001 per share (the "Shares"), reserved for issuance pursuant to the Company's 2020 Equity Incentive Plan, as amended (the "2020 Plan"). As the Company's legal counsel, we have reviewed the actions proposed to be taken by the Company in connection with the issuance and sale of the Shares to be issued under the 2020 Plan.

It is our opinion that the Shares, when issued and sold in the manner referred to in the 2020 Plan and pursuant to the agreements that accompany the 2020 Plan, will be legally and validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement, and further consent to the use of our name wherever appearing in the Registration Statement and any amendments thereto.

Very truly yours,

/s/ Wilson Sonsini Goodrich & Rosati, Professional Corporation

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

AUSTIN	BEIJING	BOSTON	BOULDER	BRUSSELS	HONG KON	G LONDON	LOS ANGELES	NEW YORK	PALO ALTO
SALT LAKE CITY SAN DIEGO S		IEGO SAN	FRANCISCO	SEATTLE	SHANGHAI	WASHINGTON, DC	WILMINGT	ON, DE	

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Pacific Biosciences of California, Inc. 2020 Equity Incentive Plan of our reports dated February 28, 2022, with respect to the consolidated financial statements of Pacific Biosciences of California, Inc. and the effectiveness of internal control over financial reporting of Pacific Biosciences of California, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, California May 26, 2022

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statement on Form S-8 filed on or about May 26, 2022 of Pacific Bioscience of California, Inc. of our report dated August 30, 2021, with respect to the financial statements of Omniome Inc., not included herein. Our report dated August 30, 2021 contains an explanatory paragraph that states Omniome's recurring losses from operations raise substantial doubt about the entity's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of that uncertainty.

/s/ KPMG LLP

San Diego, California May 26, 2022

Calculation of Filing Fee Table

Form S-8

Pacific Biosciences of California, Inc.

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common stock, \$0.001 par value per share	Other	18,000,000 (2)	\$5.47 ⁽³⁾	\$98,460,000	\$0.0000927	\$9,127.25
	Total Offering Amounts				\$98,460,000		\$9,127.25
	Total Fee Offsets						
	Net Fee Due						\$9,127.25

(1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock that become issuable under the 2020 Equity Incentive Plan ("2020 Plan") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding shares of common stock.

(2) Represents 18,000,000 shares of common stock reserved for issuance pursuant to awards under the 2020 Plan.

(3) Estimated in accordance with Rule 457(c) and Rule 457(h) of the Securities Act solely for purposes of calculating the registration fee on the basis of \$5.47, the average of the high and low prices of Registrant's common stock as reported on the NASDAQ Global Select Market on May 25, 2022.