UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

GRAYBUG VISION, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 2834 (Primary Standard Industrial 452120079 (I.R.S. Employer Identification Number)

275 Shoreline Drive, Suite 450 Redwood City, CA 94065 (650) 487-2800

Classification Code Number)

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Frederic Guerard Chief Executive Officer Graybug Vision, Inc. 275 Shoreline Drive, Suite 450 Redwood City, CA 94065 (650) 487-2800

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Effie Toshav, Esq. Robert A. Freedman, Esq. Julia Forbess, Esq. Fenwick & West LLP 555 California Street San Francisco, CA 94104 (415) 875-2300

company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Lisa Firenze, Esq.
Christopher D. Barnstable-Brown, Esq.
Craig Hilts, Esq.
Wilmer Cutler Pickering Hale and Dorr LLP
7 World Trade Center
250 Greenwich Street
New York, NY 10007
(212) 230-8800

Accelerated filer

	(212) 230-8800
Approximate date of commencement of proposed sale to the public: As	soon as practicable after the effective date of this registration statement.
If any of the securities being registered on this form are to be offered on a do 1933 check the following box. \Box	elayed or continuous basis pursuant to Rule 415 under the Securities Act of
If this form is filed to register additional securities for an offering pursuant t Securities Act registration statement number of the earlier effective registrat	
If this form is a post-effective amendment filed pursuant to Rule 462(c) und registration statement number of the earlier effective registration statement f	·
If this form is a post-effective amendment filed pursuant to Rule 462(d) und registration number of the earlier effective registration statement for the same	·
Indicate by check mark whether the registrant is a large accelerated filer, an emerging growth company. See the definitions of "large accelerated filer," "	

Non-accelerated filer

Smaller reporting company

Emerging growth company

 \times \boxtimes

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. □

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee(2)
Common Stock, \$0.0001 par value per share	1,078,125	\$16.00	\$17,250,000	\$2,240

- Represents 1,078,125 additional number of shares being registered, including 140,625 additional shares that the underwriters have the option to purchase, if any. Does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1, as amended (File No. 333-248611).
- The registration fee is calculated in accordance with Rule 457(a) under the Securities Act of 1933, as amended, or the Securities Act, based on the initial public offering price. The Registrant previously registered securities with an aggregate offering price not to exceed \$91,640,625 on a Registration Statement on Form S-1, as amended (File No. 333-248611), which was declared effective by the Securities and Exchange Commission on September 24, 2020. In accordance with Rule 462(b) under the Securities Act, an additional amount of shares having a proposed maximum aggregate offering price of \$17,250,000 are hereby registered, which includes the additional shares that the underwriters have the option to purchase.

This Registration Statement shall become effective upon filing in accordance with Rule 462(b) under the Securities Act.

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

Pursuant to Rule 462(b) under the Securities Act of 1933, as amended ("Securities Act"), Graybug Vision, Inc. ("Registrati") is filing this Registration Statement on Form S-1 (this "Registration Statement") with the Securities and Exchange Commission ("Commission"). This Registration Statement relates to the public offering of securities contemplated by the Registration Statement on Form S-1, as amended (File No. 333-248611) (the "Prior Registration Statement"), which the Registrant originally filed with the Commission on September 4, 2020, as amended, which the Commission declared effective on September 24, 2020.

The Registrant is filing this Registration Statement for the sole purpose of increasing the aggregate number of shares of common stock offered by the Registrant by 1,078,125 shares, 140,625 of which are subject to purchase upon exercise of the underwriters' option to purchase additional shares of the Registrant's common stock. The additional shares that are being registered for sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in the Calculation of Registration Fee table contained in the Prior Registration Statement. The information set forth in the Prior Registration Statement and all exhibits to the Prior Registration Statement are incorporated by reference into this Registration Statement.

The required opinions and consents are listed on the Exhibit Index attached hereto and filed herewith.

EXHIBIT INDEX

Exhibit Number	Description
5.1*	Opinion of Fenwick & West LLP
23.1*	Consent of Independent Registered Public Accounting Firm
23.2*	Consent of Fenwick & West LLP (included in Exhibit 5.1)
24.1	Power of Attorney (incorporated by reference to Exhibit 24.1 to the Registration Statement on Form S-1 (Registration No. 333-248611)).

* Filed herewith

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Redwood City, State of California, on the 24th day of September 2020.

GRAYBUG VISION, INC.

By: /s/ Frederic Guerard

Frederic Guerard, Pharm.D.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Frederic Guerard, Pharm.D.	Chief Executive Officer	
Frederic Guerard, Pharm.D.	(Principal Executive Officer)	September 24, 2020
/s/ Robert S. Breuil	Chief Financial Officer	
Robert S. Breuil	(Principal Accounting and Financial Officer)	September 24, 2020
*	Director	
Christy Shaffer, Ph.D.		September 24, 2020
*	Director	
Gerald Cagle, Ph.D.		September 24, 2020
*	Director	•
Emmett Cunningham, Jr., M.D., Ph.D., M.P.H.	Zilotto.	September 24, 2020
*	Director	
Hansoo Michael Keyoung, M.D., Ph.D.		September 24, 2020
*	Director	•
Chau Khuong, M.P.H.	Director.	September 24, 2020
*	Director	•
Cameron Wheeler, Ph.D.	Birector	September 24, 2020
*D		
*By /s/ Frederic Guerard, Pharm. D.		
Frederic Guerard, Pharm.D.		
Attorney-in-fact		

555 CALIFORNIA STREET, 12TH FLOOR SAN FRANCISCO, CA 94104
TEL 415.875.2300 FAX 415.281.1350 WWW.FENWICK.COM

September 24, 2020

Graybug Vision, Inc. 275 Shoreline Drive, Suite 450 Redwood City, CA 94065

Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-1 (the "Registration Statement") filed by Graybug Vision, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") on September 24, 2020 pursuant to Rule 462(b) of the Securities Act of 1933, as amended (the "Securities Act"), in connection with the registration of 1,078,125 shares of the Company's Common Stock (the "Stock").

In connection with our opinion expressed below we have examined originals or copies of the underwriting agreement pursuant to which the Stock will be sold to the underwriters, the Registration Statement, the prospectus prepared in connection with the Registration Statement (the "Prospectus"), the Company's Restated Certificate of Incorporation, as amended (the "Certificate"), and the Company's Amended and Restated Bylaws, as amended (the "Bylaws"), certain minutes and consents of the Company's board of directors (the "Board") or a committee or committees thereof and the Company's stockholders relating to the Registration Statement, the Certificate and the Bylaws, and such other agreements, documents, certificates and statements of the Company, its transfer agent and public or government officials, as we have deemed advisable, and have examined such questions of law as we have considered necessary. In giving our opinion, we have also relied upon a good standing certificate regarding the Company issued by the Delaware Secretary of State and a management certificate addressed to us and dated of even date herewith executed by the Company containing certain factual representations by the Company.

In our examination of documents for purposes of this opinion, we have assumed, and express no opinion as to, the genuineness of all signatures on original documents, the authenticity and completeness of all documents submitted to us as originals, the conformity to originals and completeness of all documents submitted to us as copies, the legal capacity of all persons or entities executing the same (other than the Company), the lack of any undisclosed termination, modification, waiver or amendment to any document reviewed by us.

We render this opinion only with respect to, and express no opinion herein concerning the application or effect of the laws of any jurisdiction other than, the existing Delaware General Corporation Law.

In connection with our opinion expressed below, we have assumed that, at or prior to the time of the delivery of any shares of Stock, the Registration Statement will have been declared effective under the Securities Act that the registration will apply to the offer and sale of such shares of Stock and will not have been modified or rescinded and that there will not have occurred any change in law affecting the validity of the issuance of such shares of Stock.

Based upon the foregoing, we are of the opinion that the up to 1,078,125 shares of Stock that may be issued and sold by the Company, when issued, sold and delivered in the manner and for the consideration stated in the Registration Statement and the Prospectus and in accordance with the resolutions adopted by the Board and to be adopted by the Pricing Committee of the Board, will be 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 all references to us, if any, in the Registration Statement, the Prospectus constituting a part thereof and any amendments thereto.

This opinion is intended solely for use in connection with issuance and sale of shares of Stock subject to the Registration Statement and is not to be relied upon for any other purpose. This opinion is rendered as of the date first written above and is based solely on our understanding of facts in existence as of such date after the aforementioned examination. In rendering the opinions above, we are opining only as to the specific legal issues expressly set forth therein, and no opinion shall be inferred as to any other matter or matters. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention whether or not such occurrence would affect or modify any of the opinions expressed herein.

Very truly yours,

/s/ Fenwick & West LLP

FENWICK & WEST LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-1 filed pursuant to Rule 462(b) of the Securities Act of 1933 of the reference to our firm under the caption "Experts" and to the incorporation by reference of our report dated April 21, 2020 (except for the third paragraph of Note 1, as to which the date is September 18, 2020), with respect to the financial statements of Graybug Vision, Inc. included in the Registration Statement (Form S-1 No. 333-248611) and related Prospectus of Graybug Vision, Inc. for the registration of shares of its common stock.

/s/ Ernst & Young LLP

Redwood City, California September 24, 2020