

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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

TEGAL CORPORATION
(Exact name of registrant as specified in its charter)

<TABLE>			
<S>	<C>	<C>	
DELAWARE	2201 S. McDowell Boulevard	68-0370244	
(State or other jurisdiction of incorporation or organization)	Petaluma, CA 94955 (Address of principal executive offices) (Zip Code)	(I.R.S. Employer Identification Number)	
</TABLE>			

TEGAL CORPORATION

THE SECOND AMENDED AND RESTATED
1998 EQUITY PARTICIPATION PLAN
OF TEGAL CORPORATION

THE SECOND AMENDED AND RESTATED
STOCK OPTION PLAN FOR OUTSIDE DIRECTORS
OF TEGAL CORPORATION

(Full title of the plan)

MICHAEL L. PARODI
Chairman, President and Chief Executive Officer
TEGAL CORPORATION
2201 S. McDowell Boulevard
Petaluma, CA 94955
(707) 763-5600

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

Copies to:
Christopher L. Kaufman, Esq.
Latham & Watkins
135 Commonwealth Drive
Menlo Park, CA 94025
(650) 328-4600

CALCULATION OF REGISTRATION FEE

<TABLE>
<CAPTION>

Title of Securities to be Registered	Amount to be Registered	Proposed		Amount of Registration Fee(1)
		Maximum Offering Price Per Share(1)	Maximum Aggregate Offering Price(1)	

<S>	<C>	<C>	<C>	<C>
Common Stock, \$0.01 par value issuable under:				

The Second
Amended and

</TABLE>

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<S>	<C>	<C>	<C>	<C>
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Restated 1998 Equity Participation Plan of Tegal Corporation(2)	1,000,000	NA	NA	NA
The Second Amended and Restated Stock Option Plan for Outside Directors of Tegal Corporation(3)	300,000	NA	NA	NA
Total	1,300,000	NA	\$2,335,840	\$616.66

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- (1) Estimated for the purpose of calculating the registration fee pursuant to Rule 457(c) for the 1,300,000 shares registered hereunder (the average (\$1.7968) of the high (\$2.0312) and low (\$1.5625) prices for the Company's common stock quoted on the Nasdaq National Market on December 4, 2000).
- (2) The Second Amended and Restated 1998 Equity Participation Plan of Tegal Corporation authorizes the issuance of 1,900,000 shares of the Company's common stock, 900,000 of which were previously registered on Form S-8 (File Nos. 333-66781 and 333-88373) filed with the Commission on November 4, 1998 and October 4, 1999.
- (3) The Second Amended and Restated Stock Option Plan for Outside Directors of Tegal Corporation authorizes the issuance of 600,000 shares of the Company's common stock, 300,000 of which were previously registered on Form S-8 (File No. 333-00462) filed with the Commission on January 19, 1996.

I. INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

The information called for in Part I of Form S-8 is not being filed with or included in this Form S-8 (by incorporation by reference or otherwise) in accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission").

II. INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

In this registration statement, Tegal Corporation is sometimes referred to as "we," "us" or "our."

Pursuant to General Instruction E of Form S-8, this registration statement is filed solely to register an additional 1,000,000 shares of our common stock reserved for issuance under our Second Amended and Restated 1998 Equity Participation Plan which increase was approved by our board of directors on July 8, 2000 and approved by our stockholders on September 19, 2000, and an additional 300,000 shares of our common stock reserved for issuance under our Second Amended and Restated Stock Option Plan for Outside Directors, which increase was approved by our board of directors on July 8, 2000 and approved by our stockholders on September 19, 2000.

Pursuant to General Instruction E, the following documents which we have filed with the Commission are hereby incorporated by reference in this registration statement:

- o Registration statements on Form S-8 (File Nos. 333-00462, 333-66781 and 333-88373), filed with the Commission on January 19, 1996, November 4, 1998 and October 4, 1999, respectively, except for the incorporation by reference contained therein of our registration statement on Form S-1 (File No. 33-84702), as amended, and our latest prospectus filed pursuant to Rule 424(b) under the Securities Act of 1933, as amended.
- o Our Annual Report on Form 10-K, as amended, for the fiscal year ended March 31, 2000.
- o Our Quarterly Reports on Form 10-Q for the three months ended June 30, 2000 and September 30, 2000.
- o Our Definitive Proxy Statement filed with the Commission on July 28, 2000.
- o the description of the common stock contained in our Registration Statement on Form 8-A (File No. 01-26824), which was declared

effective by the Commission on October 18, 1995, including any subsequently filed amendments and reports updating this description.

- o All documents filed with the Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, after the date of this registration statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold.

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 in any subsequently filed document which also 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.

The following additional exhibits are also attached for filing:

<TABLE>

<CAPTION>

Exhibit

Number

Description

<S>

<C>

4.1* The Second Amended and Restated 1998 Equity Participation Plan of Tegal Corporation.

4.2* The Second Amended and Restated Stock Option Plan for Outside Directors of Tegal Corporation.

5 Opinion of Latham & Watkins.

23.1 Consent of Latham & Watkins (included in Exhibit 5).

23.2 Consent of PricewaterhouseCoopers LLP.

24 Power of Attorney (included in the signature page to this registration statement).

</TABLE>

* Filed as an exhibit to the definitive proxy statement filed July 28, 2000 (File No. 0-26824) and incorporated herein by reference.

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 the 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;

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

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in 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 the 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.

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(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant'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 the 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Act 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 Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Petaluma, State of California on this 4th day of December 2000.

TEGAL CORPORATION

By: /s/ MICHAEL L. PARODI

Michael L. Parodi
Chairman, President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below does hereby constitute and appoint Michael L. Parodi and Paul N. Erickson with full power of substitution and full power to act without the other, his true and lawful attorney-in-fact and agent to act for him in his name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this registration statement on Form S-8, 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 and about the premises in order to effectuate the same as fully, to all intents and purposes, as they or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated on December 4, 2000.

<TABLE>
<CAPTION>

Signature	Title
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<S>	<C>
/s/ MICHAEL L. PARODI	Chairman, President, Chief Executive Officer and Director (Principal Executive Officer)

Michael L. Parodi

/s/ PAUL N. ERICKSON Chief Financial Officer (Principal Financial Officer)

Paul N. Erickson

/s/ KATHY PETRINI Corporate Controller (Principal Accounting Officer)

Kathy Petrini

/s/ JEFFREY M. KRAUSS Director

Jeffrey M. Krauss

/s/ THOMAS R. MIKA Director

Thomas R. Mika

Director

Edward A. Dohring

</TABLE>

INDEX TO EXHIBITS

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[LATHAM & WATKINS LETTERHEAD]

December 5, 2000

Tegal Corporation
2201 South McDowell Boulevard
Petaluma, California 94955

Re: Tegal Corporation
1,300,000 shares of Common Stock, par value \$0.01 per share

Ladies & Gentlemen:

In connection with the registration under the Securities Act of 1933, as amended, of an aggregate of 1,300,000 shares (the "Shares") of common stock, par value \$0.01 per share, of Tegal Corporation, a Delaware Corporation (the "Company"), issuable under the Tegal Corporation Second Amended and Restated 1998 Equity Participation Plan (the "Equity Plan") and the Second Amended and Restated Option Plan for Outside Directors of Tegal Corporation (together with the Equity Plan, the "Plans") by the Company on Form S-8 filed with the Securities and Exchange Commission on December 4, 2000 (the "Registration Statement"), you have requested our opinion with respect to the matters set forth below.

In our capacity as your counsel in connection with such registration, we are familiar with the proceedings taken and proposed to be taken by the Company in connection with the authorization, issuance and sale of the Shares. In addition, we have made such legal and factual examinations and inquiries, including an examination of originals or copies certified or otherwise identified to our satisfaction, of such documents, corporate records and instruments as we have deemed necessary or appropriate for purposes of this opinion.

In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to authentic original documents of all documents submitted to us as copies.

We are opining herein as to the effect on the subject transaction only of the General Corporation Law of the State of Delaware, and we express no opinion with respect to the applicability

Tegal Corporation
December 5, 2000
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thereto, or the effect thereon, of any other laws, or as to any matters of municipal law or the laws of any other local agencies within the state.

Subject to the foregoing, it is our opinion that the Shares to be issued under the Plans have been duly authorized, and upon the issuance and delivery of the Shares in the manner contemplated by the Plans, and assuming the Company completes all actions and proceedings required on its part to be taken prior to the issuance and delivery of the Shares pursuant to the terms of the Plans, including, without limitation, collection of required payment for the Shares, the Shares will be validly issued, fully paid and nonassessable.

This opinion is rendered only to you and is solely for your benefit in connection with the transactions covered hereby. This opinion may not be relied upon by you for any other purpose, or furnished to, quoted to or relied upon by any other person, firm or corporation for any purpose, without our prior written consent. We consent to your filing this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ Latham & Watkins

EXHIBIT 23.2

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated April 28, 2000 relating to the financial statements, which appears on page 35 of Tegal Corporation's Annual Report on Form 10-K for the year ended March 31, 2000. We also consent to the incorporation by reference of our report dated April 28, 2000 relating to the financial statement schedule, which appears in such Annual Report on Form 10-K.

/s/ PRICEWATERHOUSECOOPERS LLP
San Jose, California
December 5, 2000