

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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FORM S-8  
REGISTRATION STATEMENT

Under  
The Securities Act of 1933

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

DELAWARE 68-0370244  
(State or other jurisdiction of incorporation or organization) 2201 S. McDowell Boulevard P.O. Box 6020 Petaluma, CA 94955-6020 (I.R.S. Employer Identification Number)  
(Address of principal executive offices)

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TEGAL CORPORATION  
AMENDED AND RESTATED  
EQUITY INCENTIVE PLAN

TEGAL CORPORATION  
1990 STOCK OPTION PLAN  
(Full title of the plan)

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ROBERT V. HERY  
President and Chief Executive Officer  
TEGAL CORPORATION  
2201 S. McDowell Boulevard  
P.O. Box 6020  
Petaluma, CA 94955-6020  
(707) 763-5600  
(Name, address and telephone number, including area code, of agent for service)

Copies to:  
Christopher L. Kaufman, Esq.  
Latham & Watkins  
505 Montgomery Street, Suite 1900  
San Francisco, CA 94111-2586  
(415) 391-0600

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Calculation of Registration Fee

<TABLE>  
<CAPTION>

Title of Securities to be Registered	Amount to be Registered	Proposed		Aggregate Offering Price (1)	Amount of Registration Fee (1)
		Proposed	Maximum		
		Amount	Maximum		
		Offering Price Per Share (1)	Offering Price Per Share (1)		
Common Stock, \$0.01 par value	1,700,001	\$4.9778	\$8,462,382.33		\$2,918.06

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- (1) Estimated for the purpose of calculating the registration fee (i) pursuant to Rule 457(h) on the basis of the exercise price per share of outstanding options for 27,869 shares at \$7.25 per share and (ii) pursuant to Rule 457(c) for the remaining 1,672,132 shares registered hereunder (the average (\$4.94) of the high (\$5.125) and low (4.75) prices for the Company's Common Stock quoted on the Nasdaq National Market on September 16, 1996).

The following documents which have been filed with the Securities and Exchange Commission (the "Commission") by Tegal Corporation, a Delaware corporation (the "Company"), are hereby incorporated by reference in this Registration Statement:

1. The Company's Registration statement on Form S-8 (File No. 333-462) filed with the Commission on January 19, 1996, except for the

incorporation by reference contained therein of the Company's Registration Statement on Form S-1 (File No. 33-84702), as amended, and the Company's latest prospectus filed pursuant to Rule 424(b) under the Securities Act of 1933, as amended.

2. The Company's Annual Report on Form 10-K for the fiscal year ended March 31, 1996.
3. The Company's Quarterly Report on Form 10-Q for the three months ended June 30, 1996.
4. The Company's Current Report on Form 8-K filed on September 5, 1996.

#### EXHIBITS

The following exhibits are attached as part of this Registration Statement:

Exhibit Number	Description of Exhibit
4.1*	Amended and Restated Equity Incentive Plan.
4.2*	1990 Stock Option Plan.
5	Opinion of Latham & Watkins.
23.1	Consent of Latham & Watkins (included in Exhibit 5).
23.2	Consent of KPMG Peat Marwick LLP.
24	Power of Attorney (included on page 3 of this Registration Statement).

\* Filed as an exhibit to the Company's Registration Statement on Form S-1 (File No. 33-84702) and incorporated herein by reference.

#### 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 20th day of September 1996.

TEGAL CORPORATION

By: /s/ ROBERT V. HERY

Robert V. Hery  
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 Robert V. Hery and David Curtis 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 September 20, 1996.

Signature	Title
/s/ ROBERT V. HERY ----- Robert V. Hery	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)
/s/ DAVID CURTIS ----- David Curtis	Vice President of Finance and Administration and Chief Financial Officer (Principal Financial Officer)
/s/ WILLIAM F. O'SHEA ----- William F. O'Shea	Corporate Controller (Principal Accounting Officer)
/s/ FRED NAZEM ----- Fred Nazem	Director
/s/ JEFFREY M. KRAUSS ----- Jeffrey M. Krauss	Director
/s/ THOMAS R. MIKA ----- Thomas R. Mika	Director
/s/ EDWARD A. DOHRING ----- Edward A. Dohring	Director

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EXHIBIT 5

[LATHAM & WATKINS LETTERHEAD]

September 20, 1996

Tegal Corporation  
2201 S. McDowell Boulevard  
P.O. Box 6020  
Petaluma, CA 94955-6020

Re: Tegal Corporation  
1,700,001 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 (the "Act"), of an aggregate of 1,700,001 shares (the "Shares") of common stock, par value \$0.01 per share of Tegal Corporation (the "Company") issuable under the Tegal Corporation Amended and Restated Equity Incentive Plan and Tegal Corporation 1990 Stock Option Plan (collectively, the "Plans") by the Company on Form S-8 filed with the Securities and Exchange Commission (the "Commission") on September 20, 1996 (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.

[LATHAM & WATKINS LETTERHEAD]

Tegal Corporation  
September 20, 1996  
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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 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 respective 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 respective Plans, including, without limitation, collection of required payment for the Shares, the Shares will be validly issued, fully paid and nonassessable.

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 AUDITORS

The Board of Directors  
Tegal Corporation

We consent to incorporation by reference in this registration statement on Form S-8 of Tegal Corporation of our reports dated April 23, 1996, relating to the consolidated balance sheets of Tegal Corporation and subsidiaries as of March 31, 1996 and 1995, and the related consolidated statements of operations, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended March 31, 1996, and the related financial statement schedule, which reports appear in the March 31, 1996 annual report on Form 10-K of Tegal Corporation.

/s/ KPMG Peat Marwick LLP

Palo Alto, California  
September 20, 1996