

**SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

---

---

**POST EFFECTIVE AMENDMENT TO  
FORM S-8  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

---

**TEGAL CORPORATION**  
(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State of Incorporation)  
Employer Identification No.)

**68-0370244**  
(I.R.S.)

**2201 S. McDowell Boulevard  
Petaluma, CA 94954**  
(Address of Principal Executive Offices including Zip Code)

---

**THE EIGHTH AMENDED AND RESTATED 1998 EQUITY PARTICIPATION PLAN  
THE FIFTH AMENDED AND RESTATED STOCK OPTION PLAN FOR OUTSIDE DIRECTORS**  
(Full Title of the Plan)

---

**Thomas R. Mika  
President and Chief Executive Officer  
TEGAL CORPORATION  
2201 S. McDowell Boulevard  
Petaluma, CA 94954  
(707) 763-5600**

(Name, Address and Telephone Number, Including Area Code for Agent for Service)

**Copy to:**

**Christopher Kaufman, Esq.  
Latham & Watkins LLP  
140 Scott Drive  
Menlo Park, California 94025  
(650) 328-4600**

---

---

## PARTIAL DEREGISTRATION OF SECURITIES

Tegal Corporation (the "Registrant"), is filing this post-effective amendment to deregister certain securities originally registered for sale under the Registrant's Eighth Amended and Restated 1998 Equity Participation Plan of Tegal Corporation and Fifth Amended and Restated Option Plan for Outside Directors of Tegal Corporation (together, the "Prior Plans") pursuant to the Registration Statement on Form S-8 filed on October 12, 2005 (File No. 333-128953), with respect to shares of the Registrant's Common Stock, par value \$0.01 per share (the "Common Stock"). A total of 2,000,000 shares (on a post-1-to-12 reverse stock split basis) were registered for issuance under Registrant's Prior Plans.

The Registrant has since adopted a new equity incentive plan, the Tegal Corporation 2007 Incentive Award Plan (the "2007 Plan"). According to the terms of the 2007 Plan, shares that were available for grant under the Prior Plans that were not granted under the Prior Plans will be available for issuance under the 2007 Plan (the "Carried Forward Shares"). No future awards will be made under the Prior Plans. The total number of shares that were available for grant under the Prior Plans as of the date the 2007 Plan was adopted was 816,704 shares. The Carried Forward Shares are hereby deregistered.

Contemporaneously with the filing of this Post Effective Amendment to the Registration Statement on Form S-8, the Registrant is filing a Registration Statement on Form S-8 to register the Carried Forward Shares under the 2007 Plan. In accordance with Instruction E to the General Instructions to Form S-8 and other guidance promulgated by the Securities and Exchange Commission, this Post-Effective Amendment is hereby filed (i) to reallocate the Carried Forward Shares from the Prior Plans to the 2007 Plan, and (ii) to carry over the registration fees paid for the Carried Forward Shares from the Registration Statement on Form S-8 filed for the Prior Plans to the Registration Statement on Form S-8 for the 2007 Plan that is being filed contemporaneously with the filing of this Post Effective Amendment.

---

**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 21st day of November, 2007.

TEGAL CORPORATION

By:

/s/ CHRISTINE T. HERGENROTHER

Christine T. Hergenrother  
Vice President and Chief Financial

Officer

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 November 21, 2007.

<u>Signature</u>	<u>Title</u>
<u>/s/ THOMAS R. MIKA</u> Thomas R. Mika	President, Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)
<u>/s/ CHRISTINE T. HERGENROTHER</u> Christine T. Hergenrother	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ EDWARD A. DOHRING</u> Edward A. Dohring	Director
<u>/s/ JEFFREY M. KRAUSS</u> Jeffrey M. Krauss	Director
<u>/s/ CARL MUSCARI</u> Carl Muscari	Director
<u>/s/ H. DUANE WADSWORTH</u> H. Duane Wadsworth	Director

---

