

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

SCHEDULE 13D

**Under the Securities Exchange Act of 1934
(Amendment No.)***

Tegal Corporation
(Name of Issuer)

Common Stock, \$0.01 par value
(Title of Class of Securities)

879008209
(CUSIP Number)

**Yohann Benard
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Paris, France 75007
011-331-407-61010**

with a copy to:

**Lauren Boglivi
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(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

September 16, 2008
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY). Alcatel Lucent	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input checked="" type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION France	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 208,677 shares
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 208,677 shares
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 208,677 shares	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 12.36%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO	

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY). Alcatel-Lucent Participations	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION France	
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13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 12.36%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO	

Schedule 13D

Item 1. Security and Issuer.

This statement on Schedule 13D relates to the common stock, \$0.01 par value (the "Common Stock") of Tegal Corporation (the "Issuer"), having its principal executive office at 2201 South McDowell Boulevard, Petaluma, California 94954.

Item 2. Identity and Background.

(a) This statement is being filed by:

(1) Alcatel Lucent, a société anonyme organized under the laws of the Republic of France ("Alcatel Lucent"); and

(2) Alcatel-Lucent Participations (the "Record Holder"), a société anonyme organized under the laws of the Republic of France and a subsidiary of Alcatel Lucent.

The persons named in this Item 2 are referred to individually herein as a "Reporting Person" and collectively as the "Reporting Persons." Schedule I hereto, with respect to Alcatel Lucent, and Schedule II hereto, with respect to the Record Holder, set forth lists of all of the directors and executive officers or persons holding equivalent positions (the "Scheduled Persons") of each such Reporting Person.

(b) and (c) The principal business of Alcatel Lucent is providing equipment and systems for the telecommunications sector. The principal business address and principal office address of Alcatel Lucent is 3, avenue Octave Greard, Paris, France 75007.

The principal business of the Record Holder is to operate as a holding company. The principal business address and principal office address of the Record Holder is 3, avenue Octave Greard, Paris, France 75007.

(d) and (e) During the five years prior to the date hereof, neither the Record Holder nor any of the Scheduled Persons have been convicted in a criminal proceeding or has been a party to a civil proceeding ending in a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

On December 29, 2010, Alcatel Lucent was a party to a Final Judgment in connection with a complaint filed by the U.S. Securities and Exchange Commission (the "SEC"). Pursuant to the terms of such Final Judgment, Alcatel Lucent and its subsidiaries are permanently restrained and enjoined from violating certain sections of the Securities Exchange Act of 1934, as amended, including Sections 30A, 13(b)(2)(A), 13(b)(2)(B) and 13(b)(5). For further information, please see Note 35(b) to the Consolidated Financial Statements of Alcatel Lucent, included in Alcatel Lucent's Annual Report on Form 20-F filed with the SEC on March 21, 2012.

(f) Schedule I, and Schedule II hereto set forth the citizenships of each of the Scheduled Persons who is a natural person.

Item 3. Source and Amount of Funds or Other Consideration

In November 2010, the Record Holder acquired the shares of Common Stock from Alcatel Vacuum Technology France ("AVTF"), formerly a wholly-owned subsidiary of Alcatel Lucent. AVTF acquired the shares of Common Stock in connection with the liquidation of Alcatel Micro Machining Systems ("AMMS"), a wholly-owned subsidiary of Alcatel Lucent, on April 13, 2010. AMMS acquired the Common Stock on September 16, 2008 pursuant to an asset purchase agreement (the "Purchase Agreement") with the Issuer pursuant to which the Issuer agreed to purchase certain equipment, intellectual

property and other assets of AMMS for an aggregate consideration of \$5,000,000, in the form of \$1,000,000 in cash and the Common Stock representing \$4,000,000. Pursuant to the Purchase Agreement, the Issuer agreed to appoint Gilbert Bellini to its board of directors; however, AMMS' board designation right terminated when AMMS beneficially owned less than 5% of the number of shares of the Issuer's common stock issued and outstanding (including the Common Stock).

No part of the consideration for the Common Stock was represented by funds or other consideration borrowed or otherwise obtained for the purpose of acquiring, holding, trading or voting the Common Stock.

Item 4. Purpose of Transaction.

The Record Holder acquired the Common Stock for investment purposes. The Reporting Persons intend to review their investment on a regular basis and, as a result thereof, may at any time or from time to time determine, either alone or as part of a group, (a) to acquire additional securities of the Issuer, through open market purchases, privately negotiated transactions or otherwise, (b) to dispose of all or a portion of the securities of the Issuer owned by them in the open market, in privately negotiated transactions or otherwise, or (c) to take any other available course of action, which could involve one or more of the types of transactions or have one or more of the results described in the next paragraph of this Item 4. Any such acquisition or disposition or other transaction would be made in compliance with all applicable laws and regulations. Notwithstanding anything contained herein, each of the Reporting Persons specifically reserves the right to change its intention with respect to any or all of such matters. In reaching any decision as to its course of action (as well as to the specific elements thereof), each of the Reporting Persons currently expects that it would take into consideration a variety of factors, including, but not limited to, the following: the Issuer's business and prospects; other developments concerning the Issuer and its businesses generally; other business opportunities available to the Reporting Persons; changes in law and government regulations; general economic conditions; and money and stock market conditions, including the market price of the securities of the Issuer.

Except as set forth above, none of the Reporting Persons has any present plans which relate to or would result in:

- (a) The acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;
- (b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;
- (c) A sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;
- (d) Any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
- (e) Any material change in the present capitalization or dividend policy of the Issuer;
- (f) Any other material change in the Issuer's business or corporate structure;
- (g) Changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;
- (h) Causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) A class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934; or

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- (j) Any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer.

(a) At the close of business on June 14, 2012, the Issuer had 1,688,807 shares of Common Stock outstanding, of which 208,677 are beneficially owned by the Reporting Persons. The Reporting Persons currently have shared power to vote and direct the disposition of 208,677 shares of Common Stock, which in the aggregate constitutes approximately 12.36% of the outstanding shares.

Each Reporting Person disclaims beneficial ownership of the shares of Common Stock other than those shares which such person owns of record.

The percentage of outstanding Common Stock of the Issuer which may be deemed to be beneficially owned by each Reporting Person is set forth on Line 13 of such Reporting Person's cover sheet. Such percentage was calculated based on the 1,688,807 shares of common stock reported to be outstanding on the Issuer's Form 10-K/A filed with the Securities Exchange Commission on June 15, 2012.

- (b) Regarding the number of shares as to which such person has:
- (i) sole power to vote or to direct the vote: See line 7 of cover sheets
 - (ii) shared power to vote or to direct the vote: See line 8 of cover sheets
 - (iii) sole power to dispose or to direct the disposition: See line 9 of cover sheets.
 - (iv) shared power to dispose or to direct the disposition: See line 10 of cover sheets
- (c) On July 10, 2012, the Record Holder sold 200 shares of the Issuer's Common Stock at a price per share of \$4.05 in an open market transaction.
- (d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, Common Stock beneficially owned by any of the Reporting Persons.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Undertakings or Relationships with Respect to Securities of the Issuer.

Other than as described in Items 3, 4, and 5, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

Item 7. Material to be Filed as Exhibits.

Exhibit 1 – Joint Filing Agreement between Alcatel Lucent and Alcatel-Lucent Participations

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

EXECUTED this 13th day of July, 2012.

Alcatel Lucent

By: /s/ Yohann Benard

Name: Yohann Benard

Title: Secretary

Alcatel-Lucent Participations

By: /s/ Thomas Geary

Name: Thomas Geary

Title: President

SCHEDULE I

Directors and Executive Officers of Alcatel Lucent

The following table sets forth the name, position with Alcatel Lucent and present principal occupation of each director and executive officer of Alcatel Lucent. Unless otherwise indicated below, the business address of each such person is 3, avenue Octave Greard, Paris, France 75007.

<u>Name and Position of Director</u>	<u>Principal Business Address</u>	<u>Principal Occupation or Employment</u>	<u>Citizenship</u>
Philippe Camus Chairman of the Board of Directors		Chairman of the Board of Directors of Alcatel Lucent	French
Louis R. Hughes Independent Director	InZero Systems 13755 Sunrise Valley Drive, Suite 750 Herndon, VA 20171 USA	Chairman of InZero Systems	American
Lady Sylvia Jay Independent Director	L'Oréal (UK) Ltd. 255 Hammersmith Road W6 8AZ London UK	Chairman of L'Oréal UK Ltd	British
Jean C. Monty Independent Director	1485, rue Sherbrooke Ouest, Suite 2B Montreal (Québec) Canada	Retired from Bell Canada Enterprises Inc.	Canadian
Olivier Piou Independent Director	Gemalto 6, rue de la Verrerie-92190 Meudon France	Chief Executive Officer of Gemalto	French
Daniel Bernard Independent Director	Provestis 14, rue de Marignan-75008 Paris, France	Chairman of Provestis	French
W. Frank Blount Independent Director	1040 Stovall Boulevard N.E. Atlanta, Georgia 30319 USA	Chairman and Chief Executive Officer of JI Ventures Inc.	American
Carla Cico Independent Director	Strada Castellana 30/A 37128 Verona, Italy	Former CEO of Rivoli S.p.A.	Italian
Stuart E. Eizenstat Independent Director	Covington & Burling LLP 1201 Pennsylvania Avenue, N.W., Suite 1117C Washington, DC 20004 USA	Attorney; Covington & Burling LLP	American
Jean-Cyril Spinetta Independent Director	Air France-KLM 45, rue de Paris-95747 Roissy Charles de Gaulle Cedex France	Chairman of the Board of Directors and CEO of Air France - KLM	French
<u>Name and Position of Officer</u>	<u>Principal Business Address</u>	<u>Principal Occupation or Employment</u>	<u>Citizenship</u>
Ben Verwaayen Chief Executive Officer Director		Chief Executive Officer and Director of Alcatel Lucent	Dutch
Stephen A. Carter President Europe, Middle East and Africa Region, Chief Marketing and Communications Officer		President Europe, Middle East and Africa Region, Chief Marketing and Communications Officer of Alcatel Lucent	American
Robin Dargue Executive Vice President in charge of Business and IT Transformation		Executive Vice President in charge of Business and IT Transformation of Alcatel Lucent	British

Adolfo Hernandez President of the Software, Service and Solutions Segment and Strategic Industries	President of the Software, Service and Solutions Segment and Strategic Industries of Alcatel Lucent	Spanish & British
Christel Heydemann Executive Vice President in charge of Corporate Human Resources and Transformation	Executive Vice President in charge of Corporate Human Resources and Transformation of Alcatel Lucent	French
Philippe Keryer President Networks Segment	President Networks Segment of Alcatel Lucent	French
Jeong Kim President of Bell Labs and Corporate Strategy	President of Bell Labs and Corporate Strategy of Alcatel Lucent	American
Georges Nazi President of Global Customer Delivery	President of Global Customer Delivery of Alcatel Lucent	American & Lebanon
Rod Powell Executive Vice President in charge of Operations	Executive Vice President in charge of Operations of Alcatel Lucent	American & British
Rajeev Singh-Molares President Asia Pacific Region	President Asia Pacific Region of Alcatel Lucent	American & British
Paul Tufano Chief Financial Officer	Chief Financial Officer of Alcatel Lucent	American
Robert Vrij President Americas Region and Head of Alcatel Lucent Strategic Alliances	President Americas Region and Head of Alcatel Lucent Strategic Alliances of Alcatel-Lucent	American & Dutch

SCHEDULE II

Directors and Executive Officers of Alcatel-Lucent Participations

The following table sets forth the name, position with Alcatel-Lucent Participations and present principal occupation of each director and executive officer of Alcatel-Lucent Participations. Unless otherwise indicated below, the business address of each such person is 3, avenue Octave Greard, 75007 Paris, France.

<u>Name and Position of Officer or Director</u>	<u>Principal Business Address</u>	<u>Principal Occupation or Employment</u>	<u>Citizenship</u>
Thomas Geary Chairman & Chief Executive Officer		Vice President Tax and Trade	British
François Dugit-Pinat Director		Chief Accounting Officer	French
Olivier Durand Director		Group Controller	French
Paul Tufano Director		Chief Financial Officer	American

AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of shares of stock of Tegal Corporation.

EXECUTED this 13th day of July, 2012.

Alcatel Lucent

By: /s/ Yohann Benard
Name: Yohann Benard
Title: Secretary

Alcatel-Lucent Participations

By: /s/ Thomas Geary
Name: Thomas Geary
Title: President