FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of June 2011 No. 3

TOWER SEMICONDUCTOR LTD. (Translation of registrant's name into English)

Ramat Gavriel Industrial Park
P.O. Box 619, Migdal Haemek, Israel 23105
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F S Form 40-F £

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes £ No S

On June 13, 2011, the registrant announces Agreement with Tecnopolis del Sur to Assist with Research and Technological Development in Argentina.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TOWER SEMICONDUCTOR LTD.

Date: June 13, 2011 By: /s/ Nati Somekh Gilboa

Name: Nati Somekh Gilboa Title: Corporate Secretary

TowerJazz Announces Agreement with Tecnopolis del Sur to Assist with Research and Technological Development in Argentina

NEWPORT BEACH, Calif. and BUENOS AIRES, Argentina, June 13, 2011 TowerJazz, the global specialty foundry leader, today announced a signed agreement with Public and Private Consortium Tecnopolis del Sur (Tecnopolis del Sur) to help foster research and technological development in Argentina to enable product competitiveness in the international market. The terms of the agreement include training of the R&D groups of Tecnologis del Sur by TowerJazz on process design kits and technology, and TowerJazz will provide discounted multi-project wafers (MPW) space in its Migdal Haemek, Israel and Newport Beach, California fabs. In exchange, Tecnopolis del Sur will grant TowerJazz the right to use its facilities in Bahia Blanca, Argentina helping TowerJazz enter into a new region and expand its global reach into South America. This program will be using the broad spectrum of technologies that TowerJazz offers including: power management, RF CMOS and Silicon Germanium (SiGe).

Tecnopolis del Sur promotes the economic and technological development of Argentina, mainly through design, prototyping and testing of high added-value electronic systems and builds on the capacities of Universidad Nacional del Sur (leading academic institution of Argentina in IC design), INTI (National Institute of Industrial Technology), UIBB (Industrial Union of Bahía Blanca) and the infrastructure of the Trade Free Zone (TFZ) Bahía Blanca - Coronel Rosales. Tecnópolis del Sur is located in the Trade Free Zone area of Bahía Blanca and Coronel Rosales counties in the province of Buenos Aires. The location in Bahía Blanca will be built next to the airport and the location in Coronel Rosales is already located next to the seaport, providing close proximity to air and sea and easy access for product trade.

A ceremony to sign the agreement was held at the Flags Room of the Ministry of Science, Technology and Productive Innovation (Ministerio de Ciencia, Tecnología e Innovación Productiva - MINCyT) in the city of Buenos Aires on June 6, 2011, presided by MINCyT Director of International Relations, Eng. Agueda Menvielle. Also invited to attend the ceremony were members of the Argentine media and members of the Israel Embassy.

MINCyT was created to incorporate science and technology for economic and social development of the country. This goal has required a series of innovations with respect to organizational structure and financing instruments. An example of this is an initial private and public investment of \$8.6M USD by MINCyT in Technopolis del Sur. This MINCyT sponsored intiative is aimed at producing the first scientific park of the country in the electronics area.

Dr. Pedro Julian, the Principal Investigator of Tecnopolis del Sur, who was awarded the MINCyT Houssay Prize in Engineering in 2010, stressed the importance of the agreement. "Tecnopolis del Sur is a platform to empower Argentine talent by enabling conception, design and prototyping of high-added value electronic systems. We are strategically located in a Trade Free Zone with access to air and sea, offering optimal conditions to target niche electronic product markets. In a sense, Tecnopolis del Sur and TowerJazz share common roots: we both base our value on specialty solutions."

Dani Ashkenazi, Vice President of Sales for TowerJazz, is excited about this collaboration. "South America is a growing market that we are thrilled to become a part of. By working with Tecnopolis del Sur and the exceptional engineers in Argentina, TowerJazz will contribute to the expansion of their ecosystem of technology development by providing the essential components of manufacturing excellence and innovation, and in turn we will greatly expand our global reach by gaining access to this important region."

About Tecnopolis del Sur

Tecnopolis del Sur is a Public and Private Cooperative Consortium formed in order to setup the first scientific and technological park of Argentina in the area of electronics. Tecnopolis del Sur operates in the Trade Free Zone (www.zfzonasur.com.ar) of Bahía Blanca and Coronel Rosales, providing a technological infrastructure together with scientists, engineers and technicians for assisting companies and entrepreneurs in developing high qualitiy electronic systems. In addition, Tecnopolis del Sur offers a unique environment with world-class human resources, logistics and financial services and dedicated support, ideal for innovation and business opportunities. For information and updates, please visit www.tecnopolisdelsur.com.ar.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the global specialty foundry leader and its fully owned U.S. subsidiary Jazz Semiconductor, operate collectively under the brand name TowerJazz, manufacturing integrated circuits with geometries ranging from 1.0 to 0.13-micron. TowerJazz provides industry leading design enablement tools to allow complex designs to be achieved quickly and more accurately and offers a broad range of customizable process technologies including SiGe, BiCMOS, Mixed-Signal and RFCMOS, CMOS Image Sensor, Power Management (BCD), and Non-Volatile Memory (NVM) as well as MEMS capabilities. To provide world-class customer service, TowerJazz maintains two manufacturing facilities in Israel, one in the U.S., and one in Japan with additional capacity available in China through manufacturing partnerships. For more information, please visit www.towerjazz.com.

Safe Harbor Regarding Forward-Looking Statements

This press release includes forward-looking statements, which are subject to risks and uncertainties. Actual results may vary from those projected or implied by such forward-looking statements. A complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this press release or which may otherwise affect TowerJazz's business is included under the heading "Risk Factors" in Tower's most recent filings on Forms 20-F, F-3, F-4 and 6-K, as were filed with the Securities and Exchange Commission (the "SEC") and the Israel Securities Authority and Jazz's most recent filings on Forms 10-K and 10-Q, as were filed with the SEC, respectively. Tower and Jazz do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

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