

## **/ Nanotechnology specialist NaWoTec receives € 6 million /**

**Wellington Partners and Target Partners are supporting the expansion of NaWoTec GmbH with a third round of funding. The focus is on international marketing as well as developing further innovations in nanoelectronics. What convinced the venture capitalists, first and foremost, were the company's marketable products as well as its broad spectrum of future applications.**

Munich, November 26, 2002. Wellington Partners and Target Partners are investing in NaWoTec, which is headquartered in Rossdorf (not far from Darmstadt), together with existing shareholders enjoyventure and T-Venture, which is handling the transaction through its special seed fund INI-Ventures. Formed in 1999 as a Deutsche Telekom spin-off, NaWoTec has developed a unique process that utilizes an electron beam to build complex nanostructures (electron-beam nanostructuring). The applications for this technology include critical fabrication steps in the semiconductor industry, where existing methods are reaching the limits of their technical feasibility.

NaWoTec's technology enables electron-induced chemical processes to be pinpointed in depositing and removing materials, with a resolution of only a few nanometers. The prototype has already succeeded in building a structure with details of 20 nanometers in diameter, i.e. one 500,000th of a centimeter, representing an area of approximately 60 x 60 platinum atoms. The team of founders headed up by Chief Executive Officer Christian Hockemeyer and Chief Scientist Dr. Hans Koops developed the complex equipment and software to provide precise control of electrochemical processes in the nanometer range. "We have a two-year head start" over our competitors, estimates Hockemeyer, with the company's competitive edge being secured by numerous patents. Wellington Partner Bart Markus views the interest expressed by leading vendors in the semiconductor industry as confirmation of this forecast: "NaWoTec numbers among the pioneers in nanoelectronics worldwide; the major global players know this start-up and are negotiating with it."

The first step for the NaWoTec team is to ready for market a tool for inspecting and repairing photomasks. These photomasks are the heart of every chip fabrication process, because they contain the patterns for the circuitry that is lithographically transferred to each individual microchip. Even the minutest flaws in the photomasks would result in thousands of defective chips. The manufacturing process for the masks is highly complex, costing up to US\$ 400,000 per mask. Consequently, repairing these masks before they are employed in production numbers among the key steps in the chip-making process. The ion beam-based repair processes that have customarily been in use for the past 10 years are reaching their physical limits in the nanometer range. "It is our assumption that electron-beam mask repair processes like those used by NaWoTec will be utilized for the first time in conjunction with the generation of chips that will be manufactured beginning in 2004," explains Partner Waldemar Jantz of Target Partners. "This means that the major semiconductor and mask manufacturers will have to order the appropriate products next year."

NaWoTec's technology can be employed in a wide variety of further markets, such as in circuit editing – subsequent modification of finished microchips – or in building nanodevices for innovative products in the IT and medical sectors. "The combination of a product for an existing market and a broad spectrum of future applications is one of the key reasons for our engagement," stresses Wellington Partner Markus. Plus close collaboration with Zeiss subsidiary LEO, a world market leader in high-end electron microscopes. Together with NaWoTec's specific know-how, LEO is manufacturing ready-to-use devices and assuring global support. "Thanks to our partner and the new round of funding, we'll be able to launch our worldwide marketing activities in the coming months, while simultaneously pursuing the development of new applications for nanostructuring," is the way NaWoTec CEO Hockemeyer explains his goals.

Dr. Georg Schwegler, Investment Director at T-Venture, views NaWoTec as a successful example of how to market Deutsche Telekom's non-core activities by specifically supporting spin-offs. In addition to personnel and infrastructure, Deutsche Telekom AG also contributed patents to NaWoTec, as well as capital through T-Venture.

### **About Wellington Partners**

Formed in 1991, Wellington Partners invests venture capital in young start-ups throughout Europe in the fields of information and communication technology and life science and numbers among Europe's most successful early-stage financiers. To date, the Wellington Partners I fund has already returned 1.66 times its subscribed capital. The Munich-based company today manages a total fund volume of € 265 million, with € 85 million of this funding available for new investments. Wellington Partners is presently invested in over 20 companies, including Codetoys (Finland), Covast (Netherlands), EnOcean (Germany), Garderos (Germany) and Maxxio (Germany). Serving as the lead or co-lead investor, the company has already accompanied such successful technology vendors as chipbroker ACG or biotech player Actelion in going public. [www.wellington.de](http://www.wellington.de)

### **About Target Partners**

Munich-based Target Partners is an experienced venture capital company that primarily invests in companies from the IT and telecommunication industries. The management of Target Partners operates as a team and possesses long years of experience as managers, entrepreneurs or venture capitalists in the IT industry. The staff of Target Partners are experienced in developing and marketing products and services, building organizations, conducting funding rounds and taking companies public in Germany and the United States. Target Partners' fund capital totals € 112 million and is intended for investment in young start-ups, chiefly during their first or second round of funding. Investors include DZ Bank and a number of further institutional investors from Europe and the U.S. Target Partners possesses an extensive network of contacts in the IT and venture capital industries in Europe and the United States. [www.targetpartners.de](http://www.targetpartners.de)

### **About enjoyventure**

Headquartered in Düsseldorf, *enjoyventure* is an entrepreneur-managed investment company for seed and start-up financing of innovative technology companies. Right from the very beginning, the company's investment focus has consisted of selected IT solutions, microsystems technology and nanotechnology. As an industrial advisor and investor, it sees its mission as providing active coaching, intensive network contacts and management consulting. *enjoyventure's* partners are characterized by long years of entrepreneurial, financing and industrial expertise and the resulting networks. *enjoyventure* is currently invested in seven companies, including Isiltec, EnOcean, FirstSensor and VoiceObjects. As a co-investor, the company has already accompanied Amatech AG in going public.

### **About T-Venture and INI-Ventures**

INI-Ventures is a seed fund that primarily invests in spin-offs from research institutes. Its shareholders include Dresdner Kleinwort Capital, tbg Technologie-Beteiligungs-Gesellschaft and T-Venture, the corporate venture capital company of Deutsche Telekom AG. T-Venture Holding GmbH (T-Venture) invests in innovative, high-growth service providers and high-tech companies in the TIMES markets. With a total financing volume of some EURO 500 million, T-Venture has branch offices and partners in Europe, the United States, Asia and Israel.

[www.t-venture.de](http://www.t-venture.de)

## About NaWoTec

NaWoTec was founded in December 1999 as spin-off from Deutsche Telekom AG. NaWoTec has today 25 employees and is equipped with state of the art labs and clean rooms. Numerous patents for nanolithography with electron beam induced reactions as well as specifically modified electron beam devices are the basis for successful applications in following areas: semiconductors, nanoanalytics, bio-nano physics, micro optics, and nanoelectronics. Furthermore NaWoTec maintains several global partnerships within the semiconductor industry.

NaWoTec's vision is to become a key global player in the area of nanotechnology.  
[www.nawotec.de](http://www.nawotec.de)

**May be reprinted free of charge – Reference copy requested**

**For further information please contact:**

Wellington Partners  
VentureCapital GmbH

Contact: Bart Markus  
Theresienstrasse 6  
D-80333 Munich, Germany  
Tel.: +49 (0) 89 / 21 99 41-40  
Fax: +49 (0) 89 / 21 99 41-98  
E-Mail: [bart.markus@wellington.de](mailto:bart.markus@wellington.de)

Target Partners  
Fischer Appelt  
Kommunikation München GmbH

Contact: Kirsten Stiller  
Tassiloplatz 7  
D-81541 Munich, Germany  
Tel.: +49 (0) 89 / 747466-25  
Fax: +49 (0) 89 / 747466-66  
E-Mail: [kirsten.stiller@fischerAppelt.de](mailto:kirsten.stiller@fischerAppelt.de)

enjoyventure Management GmbH

Contact: Birgit Huhn  
Münsterstrasse 246  
D-40470 Düsseldorf, Germany  
Tel.: +49 (0) 211 / 239551-72  
Fax: +49 (0) 211 / 239551-77

T-Venture Holding GmbH/INI Ventures

Contact: Ferdinand Kögler  
Gotenstr. 156  
53175 Bonn  
Tel. +49-228-30 848 - 0  
Fax: +49-228-30 848 - 859  
Mail: [ferdinand.koegler@telekom.de](mailto:ferdinand.koegler@telekom.de)

NaWoTec GmbH

Contact: Christian Hockemeyer  
Industriestrasse 1  
D-64380 Rossdorf, Germany  
Tel.: +49 (0) 6154/ 8038 - 0  
Fax: +49 (0) 6154/ 8038 - 80  
Mail: [hockemeyer@nawotec.de](mailto:hockemeyer@nawotec.de)