



*Techno Fine*

**TECHNO FINE CO.,LTD.**

2-6-1Kuriki,Asao-ku,Kawasaki-shi,  
Kanagawa,215-0033,Japan  
TEL:+81-44-986-7041 FAX:+81-44-986-7042  
URL:<http://www.techno-fine.co.jp>

*Advanced Target, Bonding & Sputtering Technology*

Press Release

2008/05/26

**Techno Fine Co.,Ltd. announces commercialization of NanoFoil®,  
NanoBond® process technology of Reactive NanoTechnologies, Inc. in USA**

**Kawasaki, Japan, 22 April 2008.** Techno Fine Co., Ltd. (TFC), a developer, manufacturer and provider of bonded sputter target assemblies, having its principal place of business located at 2-6-1 Kurigi, Aso-ku, Kawasaki-shi, Kanagawa, Japan, today announces the establishment of the mass production technology of the bonding process for sputtering targets using the technology of NanoFoil® and NanoBond® from Reactive NanoTechnologies, Inc. (RNT), developer and manufacturer of its patented NanoFoil® material, having its principal place of business located at 111 Lake Front Drive, Hunt Valley, Maryland, USA.

TFC will capitalize its bonding facilities in Kawasaki, Japan, Taichung, Taiwan, and Pyeongtaek, S. Korea to bond sputter targets using RNT's patented room temperature bonding technique.

Sputtering targets used in the production of semiconductors, flat panel displays and many other devices, are witnessing rapid technological change. In spite of those innovations, up to the present, the technical development more than the applied ranges of the conventional bonding processing technique and the introduction have not been performed. However, the conventional bonding process technology has difficulty to correspond with the recent demand for the expansion of the large flat panel displays. TFC needs to solve various problems comes out from the customers demand.

TFC had entered into a licensing agreement with RNT for the use of RNT's NanoFoil® and NanoBond® technologies in January 2008 in order to meet these demands and had continued the development for the mass production.

The mass production by the nano-bonding process could realize to shorten the heating process drastically even though it is a metal bonding process. TFC considers it contributes much for environmental problems by reducing the impacts such as electricity power consumption.

“We are excited to welcome Techno Fine to RNT's family of licensees,” stated RNT's CEO, Joseph Gryzb. “Techno Fine is a leader in bonding sputtering targets for semiconductor and LCD display applications and we are delighted to enhance their ability to supply high quality, high performing target products.”

“With the majority of sputtering targets being used in Asia, and with Techno Fine's reputation as a leading supplier to the industry, I am certain that the merits of NanoBond® will quickly gain converts throughout the region,” said TFC's President, Mr. Jun Ueno. “Techno Fine is confident that the Nano-Bonding process using NanoFoil® is a transformative technology which will revolutionize the bonding process.”

**About Techno Fine Co., Ltd. (TFC)**

TFC, a pioneer in the bonding of sputtering targets, has continued the bonding operation since founded in 1980. TFC gets certain appraisal and adoption by its original technology from the market. In 2003, the governments of Korea and Taiwan recognized TFC's advanced technology leading to the

location of TFC subsidiaries in each of those countries.

Please visit <http://www.techno-fine.co.jp/> for more information.

### **About Reactive NanoTechnologies, Inc. (RNT)**

Headquartered in Hunt Valley, Maryland, Reactive NanoTechnologies, Inc. (RNT) was founded in 2001 by engineering veterans Timothy P. Weihs, Ph.D., who now serves as Chief Technical Officer, and Omar M. Knio, Ph.D., who is RNT's Senior Vice President. RNT is a venture financed company that develops and manufactures NanoFoil®.

RNT has signed licensing agreements with a number of Fortune 500 Companies. Its breakthrough technology has also earned several prestigious awards including the 2005 "R&D 100" from R&D Magazine, the 2005 Nano 50™ from NASA Nanotech Briefs Magazine and recognition in The National Nanotechnology Initiative Strategic Plan in December 2004.

For more information please visit [www.rntfoil.com](http://www.rntfoil.com).