### AUO targets full capacity by year end

Taiwan's largest manufacturer of thin-filmtransistor LCDs, AU Optronics (AUO), has reported preliminary consolidated monthly revenues of NT\$2.3 billion (US\$69 million) for February 2007 - down 20.3% from January 2007, but up 5.1% compared with last year's figure for the same month. For the fourth quarter, which ended 31 December 2006, AUO reported a net income of NT\$1.7 billion (US\$51 million) and its consolidated revenue reached NT\$94.6 billion (US\$2.85 billion). The company was formed in 2001 by the merger of Acer Display Technology and Unipac Optoelectronics. According to its President, AUO's 7.5th generation facility at the Central Taiwan Science Park is now producing 22,000 glass substrates (measuring  $1,950 \times 2,250$  mm) per month, but it is expected to reach its full capacity of 60,000 units per month by the end of the year.

#### Canon loses out in legal battle

The US District Court in the Western District of Texas has ruled that Canon of Japan has violated its agreement with Texasbased Nano-Proprietary (NPI) by forming a joint display venture with Toshiba. The summary judgement, announced at the end of February, puts a black cloud over the future development of surface-conduction electron-emitter display (SED) televisions, which are said to have brighter images and lower power consumption than existing LCD and plasma models. Nano-Proprietary initially licensed its technology to Canon in 1999 to aid the development of SED televisions based on carbon nanotubes. However, by partnering with Toshiba and forming SED Inc. to commercialize SED televisions, NPI argued that Canon breached the non-exclusive patent agreement and decided to challenge the Japanese giant electronics firm in April 2005. The case has made life complicated for Canon and Toshiba, who abruptly cancelled their plans to display their SED televisions at this year's Consumer Electronics Show held in January in Las Vegas. According to the judge, Canon's decision in January 2007 to buy out Toshiba's stake in SED Inc. with the intention of resolving the patent dispute came too late. The lawyers of the case say that the lawsuit has not only lost Canon the \$5.6 million licence with NPI, but that a fresh agreement with NPI could be worth millions of dollars more. Perhaps far more troubling, the breach of contract now allows NPI to license its technology to any other interested parties.



Robot arms in AUO's 7.5th generation facility transport sheets of glass 1 mm thick.

# Nanotechnology display company floats on market

Advance Display Technologies (ADT), a subsidiary of New York-based Advance Nanotech, commenced trading on the PLUS stock market in London in January 2007. Formed in August 2006, ADT is a provider of nano-enabled materials and devices for display applications. For its initial public offering, ADT issued 50 million shares at \$0.96 per share, valuing the company at about \$49 million. Advance Nanotech holds 94% of the issued share capital. By partnering with leading universities, ADT has developed a suite of nanotechnologies for use with flat-panel and projection displays, plastics, electronics and flexible displays. Perhaps the most important of these is its nano fieldemission display (NanoFED) technology, which uses nano-sized diamond dust to create flat-panel displays. The firm says these can rival LCD and plasma technologies. According to the firm, NanoFED is the first technology within ADT's pipeline for commercialization and is based on technology developed at the University of Bristol.

#### LG Philips to boost LCD capacity

LG Philips LCD, a joint venture between LG Electronics of Korea and Philips Electronics of The Netherlands, plans to increase the design capacity of its biggest televisionpanel production plant by 22% by the third quarter of 2007. The capacity expansion of the seventh-generation thin-film-transistor (TFT) LCD plant in Paju, Korea, will increase monthly production from 90,000 to 110,000 input sheets of glass substrate, each measuring  $1,950 \times 2,250$  mm. The company is betting on a rapid growth in demand for flat-screen televisions later this year, and recently reported a rise in quarterly sales to KRW3,065 billion (\$3,296 million) in the fourth quarter of 2006 — up 11% compared with the previous quarter and up 3% yearon-year. The plant at Paju is dedicated to the production of 42-inch and 47-inch LCD television panels and the company expects that the capacity expansion will enable the company to promptly respond to the demands of the increasing market.

#### UK funds backlighting project

The UK Department of Trade and Industry (DTI) has provided a £225,000 (\$441,900) grant to OLED-T and Microsharp, to finance development of a high-efficiency white backlight made from on-plastic organic LED (OLED) technology. For the purposes of the project, OLED-T will develop white OLED materials that will be combined with films provided by Microsharp. According to the companies, first applications of the thin and flexible new backlight will target the flat-panel-display sector, particularly micro and flexible displays. The market for such backlights is estimated to exceed \$8 billion per annum, according to DisplaySearch's market research report. "This partnership should help establish British industry as the world leader in this area and be an attractive proposition for investors," said Malcolm Wicks, the Science and Innovation Minister at the DTI.

## Exclusive carbon-nanotube backlighting deal

Mitsui & Co. of Japan has come to a licensing agreement with Nano-Proprietary (NPI). The deal allows Mitsui to extend royalty bearing licenses of NPI's patented cold-cathode technology to companies headquartered in Japan. The carbonnanotube-based intellectual property is useful for making backlights for LCDs. The agreement is only valid in the visible spectrum and for making pixel elements for electronic displays. According to NPI, the deal represents an exciting relationship as Mitsui, a company with manufacturing and distribution-channel contacts, plans to move their carbon-nanotube (CNT) technology towards commercialization through the licensing and pilot-line construction process. The deal is also seen as a further vote of confidence for CNT field-emission technology and its potential impact on the lighting and display industries.