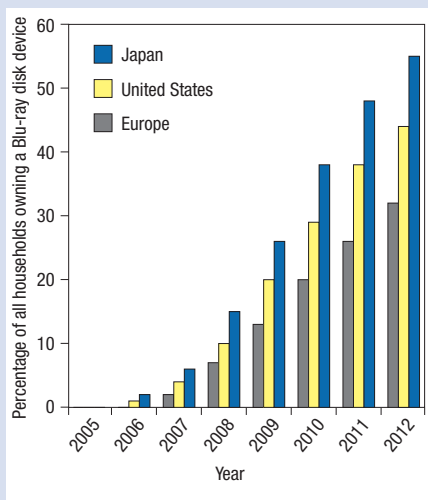


Blu-ray faces consumer challenge

STRATEGY ANALYTICS



Aided by the major motion picture studios, Sony's Blu-ray format has emerged as the preferred choice for high-definition video technology, but according to market data released by ABI Research, Blu-ray cannot rest on its laurels. A bright future for the format is not a foregone conclusion.

One of the primary challenges facing Blu-ray, according to principal analyst Steve Wilson, is that many consumers are not fundamentally dissatisfied with the quality delivered by their conventional DVD players, when 'upconverted' to play on high-definition televisions. Also, the majority of installed Blu-ray devices are components of Sony's Playstation 3 (PS3). "In 2008 about 85% of the Blu-ray players in the market will be found in PS3s; the dedicated consumer electronics and PC-based types of Blu-ray players won't catch up in terms of market share until about 2013," says Wilson. "The studios better hope that people are playing movies on their Playstations. Otherwise there's very little installed base."

In an effort to promote adoption of Blu-ray, optical-disk manufacturers are now lowering prices and PC manufacturers are offering lower-cost configurations. But ABI Research believes that the Blu-ray player and optical-drive markets must undergo further evolution before reaching their full potential. "Blu-ray disk player prices remain high, and supplies are limited," says Wilson. He believes

it will be 12 to 18 months before this market kicks into gear. "Consumer electronics manufacturers need to introduce full-featured players and then get prices down to the \$200 level. Until then, non-HDTV [high-definition television] owners will certainly favour standard-definition DVD players."

Another market analyst company, Strategy Analytics, broadly agrees with ABI Research data. Its report, *Blu-ray Devices: Forecasting Sales and Ownership*, predicts that Sony's PS3 games console will continue to drive the Blu-ray market until 2009, when stand-alone Blu-ray players will become the dominant segment. By 2012 more than 132 million homes worldwide are expected to own at least one Blu-ray device. The report predicts that global sales of Blu-ray devices will reach 18.8 million units in 2008, including 4 million stand-alone players, 13 million consoles and nearly 2 million PCs. By 2012, annual sales of all Blu-ray disk devices will reach 57.4 million units. The largest market will be in Europe, with 26.4 million, followed by the USA (22.6 million) and Japan (8.4 million).

Anwell claims first in China

Anwell Technologies has sold a Blu-ray replication system to InfoSmart, which is to be installed in InfoSmart's Hong Kong plant, making it the first Blu-ray line in commercial use in China and Hong Kong. The two companies have also formed a collaboration where they agree to share Blu-ray manufacturing-process know-how. Anwell Technologies is a provider of integrated solutions for optical-disk replication businesses. The company's activities include the design, manufacture and sale of integrated optical-disk replication systems and peripherals. Anwell is also involved in the trading and manufacturing of blank optical disks. InfoSmart operates state-of-the-art recordable-DVD (DVDR) and storage-media production facilities in Hong Kong and Brazil.

ISO approves optical-disk test standard

The International Standards Organization (ISO) has approved ISO/IEC 10995, a global standard for optical media archive life testing for recordable and rewritable DVDs. The standard will enable the optical storage industry to offer reliable archival-grade optical disks to help end-users select the media life expectancy best suited to their application requirements.

Approval of the new standard is the culmination of joint development efforts by the Optical Storage Technology Association (OSTA) and Ecma International to define standard procedures for media archive life testing and classification, and then fast track the archival-grade optical-disk testing specification through the ISO process.

"Approval of this global standard is an important milestone in our goal to enable end users to more easily identify and select archival-grade optical media, and we encourage industry-wide implementation of this standard to assist them in their purchase decisions," said David Bunzel, president of OSTA.

Sony DADC to double its disk capacity

In the course of 2008, Sony DADC (Salzburg, Austria) will expand its Blu-ray disk production and achieve a yearly production capacity of 200 million units worldwide. For its Austrian sites, Sony DADC will be recruiting at least 100 additional employees. The investments are fuelled by Warner Bros Entertainment's decision to release high-definition movies exclusively in the Blu-ray disk format. Since April 2006, Sony DADC has produced more than 110 million Blu-ray disks worldwide, of which more than 20 million are BD50 (50-gigabyte Blu-ray disks). In Salzburg alone, over 40 million Blu-ray disks have been produced.

Lone scientist sues technology titans

A retired professor from the University of Columbia, USA, has successfully settled with more than 10 companies after claiming they infringed her blue laser patents. Industry giants such as Sony, Nichia, Philips and Osram have settled with Gertrude Neumark Rothschild, who is suing more than 30 optoelectronics companies.

Her claim is that any company using or making blue lasers is infringing two patents she was granted in the early 1990s. Her patents (US patent numbers 4,904,618 and 5,252,499) outline processes for doping wide-bandgap semiconductors using primary and secondary dopants to increase the solubility of either dopant in a crystal. It is this process that made the manufacture of short-wavelength LEDs commercially feasible.

Neumark Rothschild filed her complaint with the US International Trade Commission (ITC) in February this year, and by the time this article went to press she had already settled with Seoul Semiconductor, Everlight Electronics, Epistar, Sony and Sanyo. She had also previously settled with Nichia, Philips Lumileds, Toyoda Gosei and Osram. She told *Nature Photonics*, "I just want recognition for the work that I did, and I want to show that women can do science." For the full story, see this issue of *Nature Photonics*, page 393.