

Still on the

The cathode ray tube, prematurely pronounced dead on many occasions, was the subject of an international symposium at Schott, Europe's biggest television glass manufacturer.

Karl Ferdinand Braun's invention is under pressure from the well-developed flat screen, which uses liquid crystal, plasma and polymer display technologies. If and when the CRT will become obsolete was the subject of an event bringing together 120 customers, competitors and guests from Japan, Southeast Asia, the USA and Europe. 85 percent of all CRT manu-



"CRT is more successful than present alternatives. The competition, however, will be getting tougher."

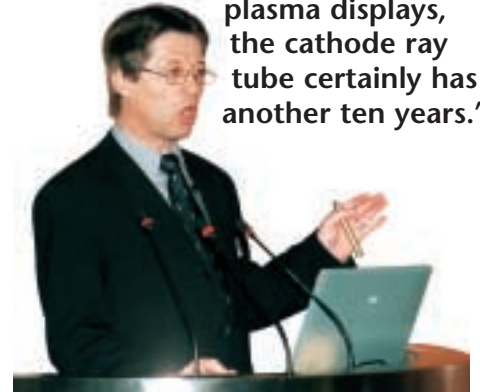
Dr. Udo Ungeheuer, Schott Glas

facturers worldwide were represented in view of global production capacity. Measured according to actual CRT glass tonnage, then 95 percent of the world market was represented. Four top guest speakers from Japan, the USA and Germany analyzed trends, the role of industrial design, the current television set and tube technology situation.

Solid basis

"In spite of many unfavorable prognoses, the cathode ray tube is firmly rooted in its market position and continues to be more successful than current alternatives", stated Schott Management Board Member Dr. Udo Ungeheuer in his welcoming remarks. The prospects for the next 10 to 15 years were good, though coupled with tougher competition on prices. The CRT producers – and Schott as a supplier of panels and funnels – would have to act cost-consciously, constantly optimize their production technology and realize innovations, which provide greater customer benefits. Ungeheuer believes the picture tube industry has a solid foundation, even if the market is evolving. Production may be shifting to China, Mexico and Eastern Europe, but Schott is monitoring developments, serving new markets and is definitely in a competitive position.

"Despite LCD and plasma displays, the cathode ray tube certainly has another ten years."



Wolfgang Clas, Grundig

TV as interface

For Grundig marketing director Wolfgang Clas it is clear that the future lies with "Net TV". The conventional TV is becoming more and more the interface in the multimedia world. Admittedly opinions differ on whether the TV set can really compete with the PC as a working tool. But surfing the Internet or online banking "on the tube" is also a possibility. Companies in the consumer electronics sector have high hopes in the so-called "Multimedia Home Platform". The CRT, according to Clas, is sandwiched between plasma and LCD displays. However the plasma display technology, which has been very expensive up till now, will not have any decisive impact in the next five years, whereby the LCD technology is moving currently into office workstations. "I agree," he said, "the CRT will certainly be around for the next ten years."



air

“Countries in the Far East will remain the main markets for the CRT, followed by the US, Europe and Japan.”

Dr. Joseph A. Castellano, president of Stanford Resources Inc., the leading market and technology research firm specializing in the electronic display industry, believes the cathode ray tube will still be in use in the year 2020 – though to a lesser extent. At present, the number of CRT units is still growing: from 275 million in 1999 to 289 million in 2000 and to 349 million in 2005. On a value basis, Stanford Resources estimates that the current worldwide CRT market volume will continue to grow – albeit slower. The countries of the Far East represent the largest market, followed by North America, Europe and Japan. Dr. Castellano does not see a change from the simple “box in the corner” to the full-blown home cinema with wide-screen and surround-sound before 2010.

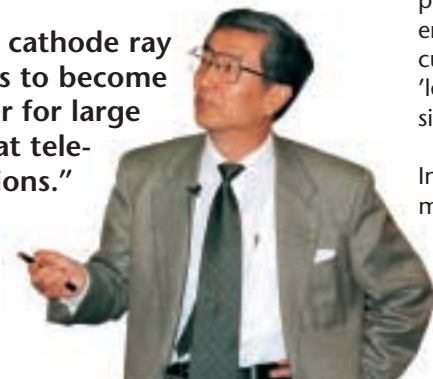


Dr. Joseph A. Castellano, Stanford Resources

Weight and design decisive

Makoto Maeda, who is responsible for CRT development at Sony and a member of international display committees, spoke out in favor of a re-

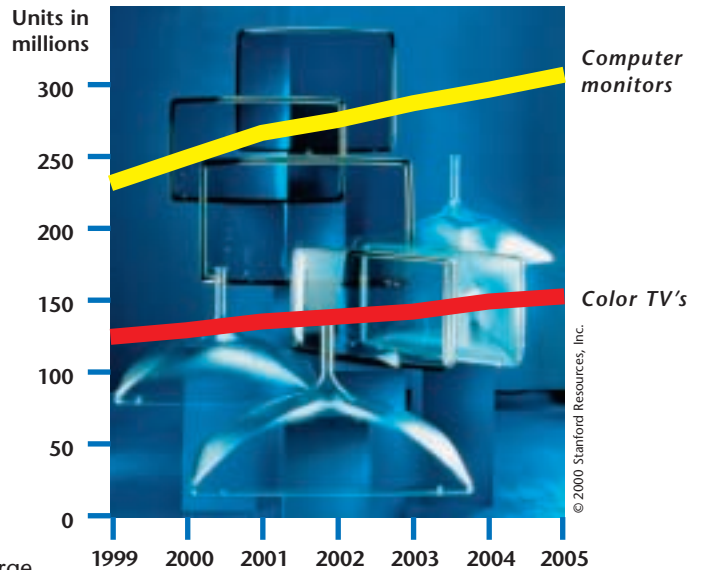
“The cathode ray tube has to become lighter for large format televisions.”



Makoto Maeda, Sony

duction in weight, which should allow the cathode ray tube to enjoy quite a few flourishing years yet.

Worldwide CRT Market



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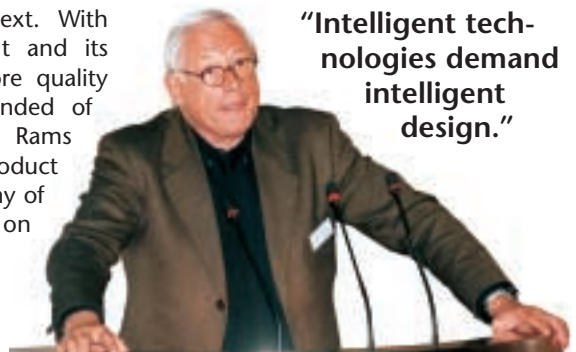
The trend is moving to large diagonals (27 to 36 inch), higher resolution screens and flat screens. Since 1999 80% of Sony's TV sales have been flat screens. He believes there is no stopping the era of digital TV but also that the CRT can expect further continual growth.

The demand for cathode ray tubes will increase in the next few years before slowly decreasing, according to prognoses.

Well-known industrial designer Professor Dieter Rams, formerly responsible for design as member of the board at Braun AG, discussed the significance and perspectives for design in both an economical and social context. With rapid economic development and its ecological consequences, more quality and responsibility are demanded of product design. Professor Rams envisions a more humane product culture and product philosophy of ‘less but better’, with a focus on simplicity and the essentials.

In all, the symposium sent a message of optimism to the international experts and manufacturers present: investments and innovation in the ‘tried and true’ CRT technology are still worthwhile ■

“Intelligent technologies demand intelligent design.”



Professor Dr. Dieter Rams, Designer