+44 20 8123 2220
info@marketpublishers.com

Quantum Dot and Quantum Dot Display (QLED): Market Shares, Strategies, and Forecasts, Worldwide, Nanotechnology, 2013 to 2019

https://marketpublishers.com/r/Q79F3223123EN.html
Date: March 2013
Pages: 221
Price: US$ 3,800.00 (Single User License)
ID: Q79F3223123EN

Abstracts

WinterGreen Research announces that it has published a new study Quantum Dot and Quantum Dot Display (QLED) Market Shares, Strategy, and Forecasts, Worldwide, 2013 to 2019. The 2013 study has 221 pages, 80 tables and figures. Quantum dots will cascade into the marketplace. They offer lower cost, longer life, and brighter lighting.

According to Susan Eustis, "The commercialization of quantum dots using kilogram quantity mass production is a game-changer. High quality, high quantity and lowest price quantum dots increase product quality in every industry. The rate of change means speeded products cycles are evolving."

Once manufacturers learn to integrate higher efficiency luminescent quantum dots into their products, each vendor will need to follow or dramatically lose market share. This level of change brought by quantum dot and quantum dot displays (QLED) represents a new paradigm that will create new industries, products and jobs in science and industry. The list of possible quantum dot applications is ever expanding. New applications are waiting for the availability of more evolved quantum dots.

Quantum Dot LED (QLED) commercial focus has remained on key optical applications: Optical component lasers are emerging as a significant market. LED backlighting for LCD displays, LED general lighting, and solar power quantum dots are beginning to reach the market. Vendors continue to evaluate other applications.

Quantum dots QDs are minute particles or nano-particles in the range of 2 nm to 10 nm diameter. Quantum dots are tiny bits of semiconductor crystals with optical properties that are determined by their material composition. Their size is small to the nanoparticle

+44 20 8123 2220
info@marketpublishers.com

level. They are made through a synthesis process. QD Vision synthesizes these materials in solution, and formulates them into inks and films. Quantum Dot LEDs (QLED) enable performance and cost benefits.

The quantum dot cannot be seen with the naked eye, because it is an extremely tiny semiconductor nanocrystal. The nanocrystal is a particle having a particle size of less than 10 nanometers. QDs have great potential as light-emitting materials for next-generation displays with highly saturated colors because of high quantum efficiency, sharp spectral resolution, and easy wavelength tenability. Because QDs convert light to current, QDs have uses in other applications, including solar cells, photo detectors, and image sensors.

QLED displays are anticipated to be more efficient than LCDs and OLEDs. They are cheaper to make. Samsung estimates that they cost less than half of what it costs to make LCDs or OLED panels. QLED quantum dot display is better than OLED. It is brighter, cheaper, and saves more energy. Energy-savings is a strong feature. Its power consumption is 1/5 to 1/10 of the LCD's Samsung offers now. Manufacturing costs of a display are less than half of OLED or LCD. It has a significantly longer life than the OLED.

QLED quantum dot display uses active matrix to control the opening and closing of the pixels of each color. Quantum dots have to use a thin film transistor. Emission from quantum dots is due to light or electrical stimulation. The quantum dots are able to produce different colors depending on the quantum shape and size used in the production of materials.

Dow Electronic Materials, a business unit of The Dow Chemical Company (NYSE: DOW) and Nanoco Group plc (AIM: NANO) have a global licensing agreement for Nanoco's cadmium-free quantum dot technology. Under the terms of the agreement, Dow Electronic Materials will have exclusive worldwide rights for the sale, marketing and manufacture of Nanoco's cadmium-free quantum dots for use in electronic displays.

+44 20 8123 2220
info@marketpublishers.com

Contents

+44 20 8123 2220
info@marketpublishers.com

3. QUANTUM DOT DISPLAY PRODUCT DESCRIPTION

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

List Of Tables

LIST OF TABLES AND FIGURES

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Quantum Dot and Quantum Dot Display (QLED): Market Shares, Strategies, and Forecasts, Worldwide, Nanotechnology, 2013 to 2019

Product link: https://marketpublishers.com/r/Q79F3223123EN.html

Price: US$ 3,800.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/Q79F3223123EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

+44 20 8123 2220
info@marketpublishers.com