



THE TECHNOLOGY NEWS SITE



We offer innovative and tailored solutions to give your business the competitive edge. »

NEWS | OPINION | IN DEPTH | SURVEYS | EVENTS | ITWEB INFO

-- Industry Portals --

VIRTUAL PRESS OFFICES™ - By company

- By industry sector

FREE NEWS SERVICES

- Newsletters
- RSS feeds
- Alerts

CAREERWEB

- Register
- Post your CV
- Find your job

BRAINSTORM

- Subscribe
- Read online

iWEEK

- Subscribe
- Read online
- Get into iWeek

IT TRAINING

- TrainingWeb

ITWEB EVENTS

- Events Calendar

FEEDBACK

- Post your feedback
- Send us a news tip

HOME

21 August 2009

BROUGHT TO YOU BY

SEARCH |

VOX telecom

COMPUTING NEWS

<< Computing Reuters >>

21 August 2009

COMPUTING | more..

- Blatter upbeat on 2010
- Countdown to virtual classroom

LEDs get flexible

BY REUTERS

[Chicago | Reuters News Service, 21 August 2009] - US researchers have found a way to make large-scale, flexible display screens that can be stretched to fit the contours of a bus yet are transparent enough so riders can see out windows.

The thin, light screens might be used to make brake light indicators that follow the contours of a car, or health monitors or imaging devices that wrap around a patient like a blanket, said John Rogers of the University of Illinois at Urbana-Champaign, whose study appears in the journal Science.

He said the large display screens combine the scale and durability of light-emitting diodes, or LED technology, used to make flat, lighted billboards, with the flexibility of screens made using organic, carbon-containing, materials.

"If you look at these giant billboard displays along the road side, those are made out of inorganic light emitting diodes (LEDs). Our feeling is those systems are quite impressive," Rogers said in a telephone interview.

"The question became is it possible to take that technology and use it in a non-billboard format."

Rogers said current technology using inorganic materials produces chunky individual LED lights that need to be arranged piecemeal with a robotic arm. Screens made using organic materials can be sprayed or painted onto a film surface, but they are not as bright or durable, he said.

To solve this challenge, researchers built their LEDs on a thin layer of film later dissolved by a chemical and then affixed tiny plastic tabs on two corners to ensure the LEDs did not wash away in the chemical bath.

The team used a special stamping technology to deposit and assemble the inorganic LEDs onto glass, plastic or rubber surfaces. The system works much like a rubber stamp and ink pad, using the LEDs as ink.

"The new approach can lift large numbers of small, thin LEDs from the wafer in one step, and then print them onto a substrate in another step," Rogers said.

The LEDs can be interconnected and wired with a conventional process used to wire computer chips, he added. And because LEDs can be placed far apart and still provide enough light, the panels and displays can be nearly transparent.

"We can put them on a strip of plastic and make brake lights," said Rogers, who noted that the project was initially funded in part by Ford Motor, which was looking for a way to make brake lights that can follow the contour of a car.

The National Science Foundation and the US Department of Energy also funded the project.

Comment on this

- Quick print
- Personal archive
- Send to a friend
- Send a sms

Sponsor's Message

The FortiMail family of secure appliances provides; effective barrier against spam, maximum protection against sophisticated email attacks as well as features designed to facilitate regulatory compliance.

Virtual Press Office™

Click here for the latest Zycko: Fortinet company news.

advertisement

SMEXA 2009

13 and 14 October 2009

Gallagher Convention Centre

The definitive IT Service Management Conference & Exhibition in South Africa

Click here to Register!

SPONSORS

sponsor



FortiMail

sponsor



MTN Business

COMPUTER



See what Pro support services are available with your Dell. Click here.

ENERGY



HP is delivering real innovation and has a mature and robust Adaptive Infrastructure portfolio.

PROJECT 2009 **BPM SUMMIT & AWARDS**

BPM Summit & Awards 2009 25-27 August, Montecasino, Fourways The BPM Awards are open to anyone who has a successful BPM implementation story to tell. We are now seeking entries for the awards, so get your application in early!

FINANCIAL | more..

- Comcast loses more subscribers
- Sanral raises R1.5bn funding

LEDs get flexible

The thin, light screens might be used to make brake light indicators that follow the contours of a car, or health monitors or imaging devices that wrap around a patient like a blanket, said John Rogers of the University of Illinois at Urbana-Champaign, whose study appears in the journal Science.

MTN Business

Integrated and innovative global solutions with a local focus. »



BUSINESS | more..

- Poor connectivity stifles SaaS

Early bird: R2 915 (excl) VAT

ITWeb SOA Conference

20 - 21 October | The Forum, Bryanston

SOA enabling IT departments to improve responsiveness

- > Hear from SOA experts over two days, from corporates, vendors and industry analysts.
- > Learn from real-world SOA experiences from Standard Bank, Old Mutual, FNB, Nedbank and Zurich Insurance.

Click here to register today!

MS comes out swinging

INTERNET | more..

- Web 2.0's invisible threat
- ISPs take a stand for Internet freedom

Subscription Centre

Free daily and weekly newsletters. Latest IT and telecoms news, information and commentary. [Click here to subscribe.](#)

MS comes out swinging

ENTERPRISE | more..

- Open Text supports standard
- SolTech appoints director

More Computing News

- Wikipedia to add editing safeguard
- Logitech receiver multiplies connections
- Wait and see for 3D

MS comes out swinging

NETWORKING | more..

- Time Warner offers 4G
- Mundo Startel uses Alvarion

Most Popular Stories

- ICASA a 'lazy horse', 'dead duck'
- Strict gov't timelines for ICT projects
- Telkom mum on Multi-Links head

Brought to you by **internet solutions** A DIVISION OF DIMENSION DATA

MS comes out swinging

TELECOMS | more..

- DST looks to space
- Sprint to sell AM-OLED phones

Sponsored links

- Effective Service Management helps cost reduction and improves IT

MS comes out swinging

CHANNEL | more..

- M-IT gets gold

Channel

MS comes out swinging

• Comztek resellers offered reward

- RSS feed
- News Alerts

efficiency, click here.

- Comztek distributor of choice, call us now on 0800 600 557.
- Experienced Flash programmer to work on a range of challenging projects.
- Hear from the leading players who are driving the development of broadband communications, book your seat today!

advertisement



We offer innovative and tailored solutions to give your business the competitive edge. >>

Copyright (c) 1996 - 2009 ITWeb Limited. All rights reserved.
Would you like to see your news here? Contact us for more details at itnews@itweb.co.za

