

## Samsung rowing harder and faster for flexible screen production

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(Phys.org)—Is Samsung getting ready to release a line of <u>flexible</u> <u>displays</u> made of glass-replacing plastic? The right words in response may be "well, finally," or "well, maybe." *The Wall Street Journal* has talked to a source who said that Samsung, in the words of the WSJ subheading, "Plans to Mass Produce Flexible Mobile-Device Screens" in the first half of next year. The source was not named and was only



described as "a person familiar with the situation." Samsung has tantalized techies and consumers with its futuristic videos showing a beautiful-life day using wearable wrist computers, auto dashboard display screens, location-finding smartphones, and wall mounted computer screens of plastic rather than glass.

Expectations are that <u>Samsung</u>, as part of the grand mix, is to start mass production of smartphone screens using <u>bendable plastic</u> rather than glass. According to the WSJ report, Samsung's <u>flexible displays</u> will incorporate OLEDs.

Analysts believe the move into mass production would be a real business advantage as smart-device makers in competition with Samsung scramble for attention and market share with their designs and feature sets. Some of the reasons why a Samsung customer would favor <u>plastic</u> rather than conventional glass would be lightness and durability. As for Samsung, the technology could also help lower manufacturing costs as well as differentiate its products from rivals, said an analyst at Shinyoung Securities in the WSJ report.

Hopes that Samsung would not miss the 2012 mark in flex displays for television were shelved this year with reports of problems preventing release of the 55-inch OLED TVs. The idea had been to sell them in time for the London Olympics.

Samsung is considered one of the leaders in OLED display research and the leader in (Active Matrix) AMOLED, where a transistor next to each pixel brings faster response time. <u>OLED</u> Displays are thinner, more efficient and offer better picture quality than LCD or Plasma displays.

As for smartphones, back in March, analysts were already talking about how Samsung was looking at its plastic-backed <u>AMOLED</u> devices to make lightweight, ultra-thin phones with foldable screens. Analysts said



they expected to see Samsung apply plastic substrate-based, bendable or curved displays for smartphones with the first products carrying a design where a screen is folded over the edges of a phone, so that the display continues on to the sides. The display would be unbreakable.

Samsung claims that by 2014, 50 percent of cell phones might have AMOLED displays, and by 2015 it could become the main TV panel technology.

**More information:** online.wsj.com/article/SB10001 ... 116392091283994.html

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