

Electronics Newsletter

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Glaser

Study sees crystals overtaking LEDs ...

The light emitting diode display, causing such a stir today as it finds its way into more and more applications, will find its growth flattening out by 1975 in the face of competition from liquid crystals. At least that's what analysts at Arthur D. Little Inc. say. In conjunction with another study, Little's experts found that the largest markets for miniature displays—calculators—and miniature lamps—autos—would effectively be closed to LEDs because of their cost and power dissipation.

The Little study points out that liquid crystal, which dissipates less power, holds promise of much lower cost than LEDs.

... as liquid crystals show up in watches

Virtually every watch company is evaluating liquid crystal displays for solid state watches. By now, they're being combined with complementary MOS logic and half a dozen major semiconductor houses and a number of lesser lights are vying for development contracts.

For example, the Hamilton Watch Co. is on the verge of signing up a C/MOS-liquid crystal supplier but doesn't expect that timepieces will be on the market for at least a year and maybe two. Reason: lifetime of the liquid crystals is still too uncertain. Says John Bergey, director of watch development for Hamilton, "We're looking for three to five years' life when suppliers can only talk of 10,000 hours."

But while the watch companies are joining the liquid crystal movement, it's also possible that an electronics company able to make the circuit and the display may be the first on the scene with its own electronic watches, despite the risks in learning a new consumer market.

Meanwhile, North American Rockwell Microelectronics Co. will show a multimeter at Wescon that it believes to be the first U.S.-made instrument sporting a liquid crystal display.

Radiation rumor may be probed

A national investigation of the biological effects of low-frequency radiation is getting under way. It was sparked by the concern of engineers over persistent rumors that brain tumors were caused by exposure to non-ionizing radiation at 20 kilohertz to 10 gigahertz.

One incident that fueled the spread of rumors is alleged to have occurred several months ago at Philco-Ford in Philadelphia where work was being done on a secret Government project. A company spokesman has branded as an "out-and-out hoax" any stories connecting the experiments and one death from astrocytoma and another case of brain damage.

Edward Baier, director of the Pennsylvania Environmental Resources Department's Division of Occupational Health, had cleared Philco-Ford of any negligence, but has requested that the case be reopened and that a national study determine whether other cases have occurred elsewhere.

And as Federal and Pennsylvania officials met, the U.S. Bureau of Radiological Health said that the meeting was triggered by three companies' informal request for an official bureau statement.

DEC 'monitor' to eye machine tools

The Digital Equipment Corp. has introduced a machine monitor version of its PDP-14 computer. Called the MAP-14 (for machine analyzer package), it's expected to reduce computer-controlled machine downtime drastically. According to Donald Chase, DEC's industrial control