June 12th

Kurt Lehovec

Born: June 12, 1918;

Ledvice, Bohemia
Died: Feb. 17, 2012

After attending a 1958 seminar by Torkel Wallmark at Princeton on the three fundamental problems facing integrated circuits (integration, isolation, and connection), Lehovec invented a way to electrically isolate components on a semiconductor crystal, solving the second of the three issues.

Lehovec worked for Sprague Electric at the time, which showed no interest in his breakthrough. So, on April 22, 1959, he filed a patent application at his own expense, which was assigned to Sprague Electric on April 10, 1962. However, because Lehovec was under salary at Sprague, he was paid a princely one dollar for his efforts.

Texas Instruments immediately claimed that the isolation problem had been solved in an earlier patent by Jack Kilby [Nov 8]. Sprague was almost persuaded to give up its rights, but was convinced otherwise by Lehovec; his priority was finally acknowledged in April 1966.

Kilby was awarded the 2000 Nobel Prize in Physics "for his part in the invention of the integrated circuit". Many historians identify Kilby, Bob Noyce [Dec 12], Lehovec, and Jean Hoerni [Sept 26] as the co-inventors.

Merging Networking Giants

June 12, 1997

3Com Corp. and U.S. Robotics Corp. (USR) [Feb 24] announced their merger, making it the largest business deal in the history of the networking industry, costing some $8.5 billion. At the time, USR was a maker of dial-up modems, and owner of Palm [March 10]. As a result, 3Com became the second largest networking company after Cisco.

3Com was founded in 1979 by Robert Metcalfe [April 7], Howard Charney, Bruce Borden, and Greg Shaw. Metcalfe had been motivated by Xerox's lack of interest in his networking research at PARC [July 1]. For instance, he completed his innovative Xerox Network Systems (XNS) protocol in 1978, but it was completely ignored.

Hewlett-Packard acquired 3Com in April 2010 for $2.7 billion (a disappointing drop in value).

NaturallySpeaking

June 12, 1997

Dragon Systems released the first version of its speech-recognition program, NaturallySpeaking (aka "Dragon for PC" and DNS), featuring a vocabulary of 30,000 words. It replaced Dragon Systems' disappointing DragonDictate which forced the user to speak each word separated by a small pause.

James Baker and his wife, Janet, founded Dragon Systems in 1982 to release products centered around their work. Baker had created his first speech understanding system in 1975, which was called DRAGON.

Underhanded C

June 12, 2005

The "Underhanded C" contest (http://www.underhanded-c.org/) aims to produce C code that is malicious, but passes a rigorous inspection, and looks like an honest mistake if discovered.

The first contest was organized by Scott Craver, who gathered inspiration from the IOCCC [April 11]. The task was to implement basic image processing, such as resampling or smoothing, which also covertly added "fingerprinting" data to the image. The winning entries utilized uninitialized data structures, reused pointers, and ran machine code embedded inside constants.

Dell Catches Fire

June 12, 2006

A Dell [May 3] laptop exploded during an Open Mobile Alliance conference at the New Otani hotel in Osaka. There had been several reports of laptops catching fire before this one, but this laptop's demise was caught on video in full color.

The burning laptop. Photo by secumem. CC BY-SA 3.0.

Dell's subsequent investigation traced the problem to the battery/power supply which had overheated. The company eventually recalled and replaced 4.1 million batteries. But the company's chief executive Michael Dell laid the blame squarely at the feet of the manufacturer – Sony.

This was the beginning of some bad months for Sony's batteries. On Aug. 14, after numerous more incidents, the company issued the largest recall in consumer electronics history, involving some 9.6 million batteries. Sony estimated that it would cost them between 20 and 30 billion Yen.

That wasn't the end. On Aug. 24, Apple recalled 1.8 million Sony batteries after receiving nine reports of overheating, including two customers who suffered minor burns.

The underlying problem is that lithium-ion batteries can fail in

several ways: by being recharged too quickly or by too much, by short circuits induced by physical damage, or even by putting a battery close to coins. Aside from the heat issue, the battery can also generate gases that can react poorly with other materials. Safety features exist, but are costly, and so the problems have persisted; see [Aug 19], [Aug 28].